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FOREIGN OWNERSHIP AND FOREST-BASED INDUSTRIES

Prepared as part of a study on
**FOREIGN OWNERSHIP:
CORPORATE BEHAVIOUR AND PUBLIC ATTITUDES**

for the
SELECT COMMITTEE ON ECONOMIC AND CULTURAL NATIONALISM
of the
**LEGISLATIVE ASSEMBLY
PROVINCE OF ONTARIO**

by
KATES, PEAT, MARWICK & CO.
OCTOBER, 1973

PUBLISHED BY
THE SELECT COMMITTEE ON ECONOMIC
AND CULTURAL NATIONALISM
OF THE LEGISLATIVE ASSEMBLY OF ONTARIO

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The views expressed in this report are those of the
Kates, Peat, Marwick & Company Study Team, and are not necessarily
those of the Select Committee.

.....

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October 26, 1973

Mr. Russell D. Rowe, MPP
Chairman
Select Committee on Economic and
Cultural Nationalism
Room 104
Parliament Buildings
Queen's Park
Toronto, Ontario

Dear Mr. Rowe:

This report, Foreign Ownership and Forest-Based Industries, is submitted to you as part of the overall study of Foreign Ownership: Corporate Behaviour and Public Attitudes which we are conducting on behalf of the Committee. The Forest-Based Industries represent the fifth of six industries to be reported on by our firm; owing to the particular importance of pulp and paper in Ontario, the report concentrates primarily on this segment of the Forest-Based Industries.

We would like to express our appreciation to the forest-based firms and officials who cooperated in our research effort, and to the staff of the Select Committee and Select Committee members who assisted in reviewing earlier drafts of the report.

In accordance with our terms of reference this report provides factual and attitude information on the forest-based industries and their people, relative to the various issues of foreign ownership and control. Policy recommendations are not made since the Committee will be drawing its own conclusions based on this and other information before it.

We have attempted to make the report as complete and objective as possible within the context of available time and resources, and we trust that it will assist the Committee in its deliberations.

Yours truly

Kates, Peat, Marwick & Co.

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ONTARIO SELECT COMMITTEE
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FOREST-BASED INDUSTRIES

TABLE OF CONTENTS

	<u>Page</u>
I - <u>BACKGROUND, APPROACH AND METHODOLOGY</u>	1
Background	1
Approach	3
Methodology	6
Study Organization	10
II - <u>THE IMPORTANCE OF FOREST INDUSTRIES TO CANADA AND ONTARIO</u>	13
Market Position	24
Productivity and Costs	26
Regional Importance of Industries in Ontario	37
Foreign Ownership in Canada	38
Foreign Ownership in Ontario	42
III - <u>BEHAVIOUR OF FIRMS</u>	47
Husbandry of Forest Resources	47
Water and Air Pollution	48
Research and Development	51
Large-scale Reduction in Labour Force	54
Wages and Benefits	55
IV - <u>SOME GENERAL ASPECTS OF FOREIGN OWNERSHIP</u>	59
Branch Plants - Miniature Replicas	59
Truncated Industries	61
Export Restrictions	65
Purchase of Production Machinery	71
Profitability	74
Engineering Consultants	75
Potential Industry Behaviour and Government Responses	76

TABLE OF CONTENTS

- 2 -

V - <u>ATTITUDES</u>	81
Continentalism	81
Government Intervention	
- Conflicting Objectives	81
Problems of the Pulp and	
Paper Industry	83
VI - <u>COMPARISON WITH SWEDEN</u>	85
VII - <u>CONCLUSIONS AND POLICY CONSIDERATIONS</u>	89
Level of Foreign Ownership	89
Direct Economic Effects of	
Foreign Ownership	91
Corporate Citizenship	92
Canadian Firms in the	
United States	94
Expansion of Subsidized	
Foreign Ownership	95
Wage Escalation in Canada	
and the United States	96
A Continental Approach	97
Future Prospects	98
 <u>EXHIBITS</u>	
1. From Tree to End Product	2
2. Measurement Units of Forest-Based	
Industries in Ontario	6
3. Pulp and Newsprint Production and	
Export, Canada as Percentage	
of World, 1950 - 1970	13
4. Contribution of Pulp and Paper	
Industry to Canadian Economy,	
1950 - 1970	13
5. Value Added and Employment in	
Forest and Allied Industries	14
6. Forest Wealth, Canada and Ontario, 1970	15
7. Forest Utilization, Canada and	
Ontario, 1970	16

TABLE OF CONTENTS

- 3 -

EXHIBITS (Cont'd)

8.	Regional Size Class Distribution of Timber by Diameter at Breast Height (DBH)	17
9.	Merchantable Timber by Species, Canada and Ontario, 1968	18
10.	Mill Shipments of Paper and Paper- board, Canada and Ontario, 1970	19
11.	Production of Roundwood and Lumber, Ontario, 1951 -1970	19
12.	Ontario's Share in Canada's Production	21
12(a).	Estimated North American Newsprint Markets and Production Flows	20
13.	Number of Establishments and Employees in the Forest and Allied Industries, Ontario, British Columbia, and Canada, 1963 and 1970	22
14.	Value Added by All Manufacturing and by Pulp and Paper Industries, Canada and the United States, 1963 - 1967	27
15.	Pulp and Paper Industry Base Labour Rates	28
16.	Base Labour Rates \$/Hour	29
17.	Wood Costs per 100 Cubic Feet, Canada and the United States, 1970	30
18.	Rail Rates for Newsprint, 1971	32
19.	Trend of Purchased Power Costs at Representative Ontario Newsprint Mill	34
20.	Power Contracts 1972	35
21.	Economic Regions and Ministry of Natural Resources Districts	36
22.	Regional Distribution of Resources, Employment, and Production of Forest Industries, Ontario (1967)	38
23.	Ownership and Control in the Paper Industry, Canada, 1968-1970	39
24.	Ownership and Control in the Pulp and Paper Industry, Canada, 1954-1970	40

TABLE OF CONTENTS

- 4 -

EXHIBITS (Cont'd)

25(a).	Percentage Return on Assets for Major Pulp and Paper Companies, Canada, 1963-1972	43
25(b).	Net Income Before Tax for Major Pulp and Paper Companies, Canada, 1970-1973	43
26.	Licensed Area by Ownership	44
27.	Research in Pulp and Paper by all Firms, Canada and the United States, 1969 - 1972	52
28.	Newsprint - Seasonally Adjusted Annual Rates, 1952-1972	64
29.	Annual Company Newsprint Production as a Percentage of Annual Company Newsprint Capacity, Selected Firms, 1960-1972	66
30.	Distribution of Canadian Newsprint Shipments, 1971	68
31.	Destination of Canadian Newsprint Export Shipments, 1952-1962	69
32.	Swedish Deliveries of Newsprint, 1971	69
33.	Revenue and Profit for Paper and Allied Industries, Canada and the United States, 1962-1971	74
34.	Comparison of Canadian and Swedish Indicators, 1970	85

APPENDIX

Questionnaires

I - BACKGROUND, APPROACH AND METHODOLOGY

BACKGROUND

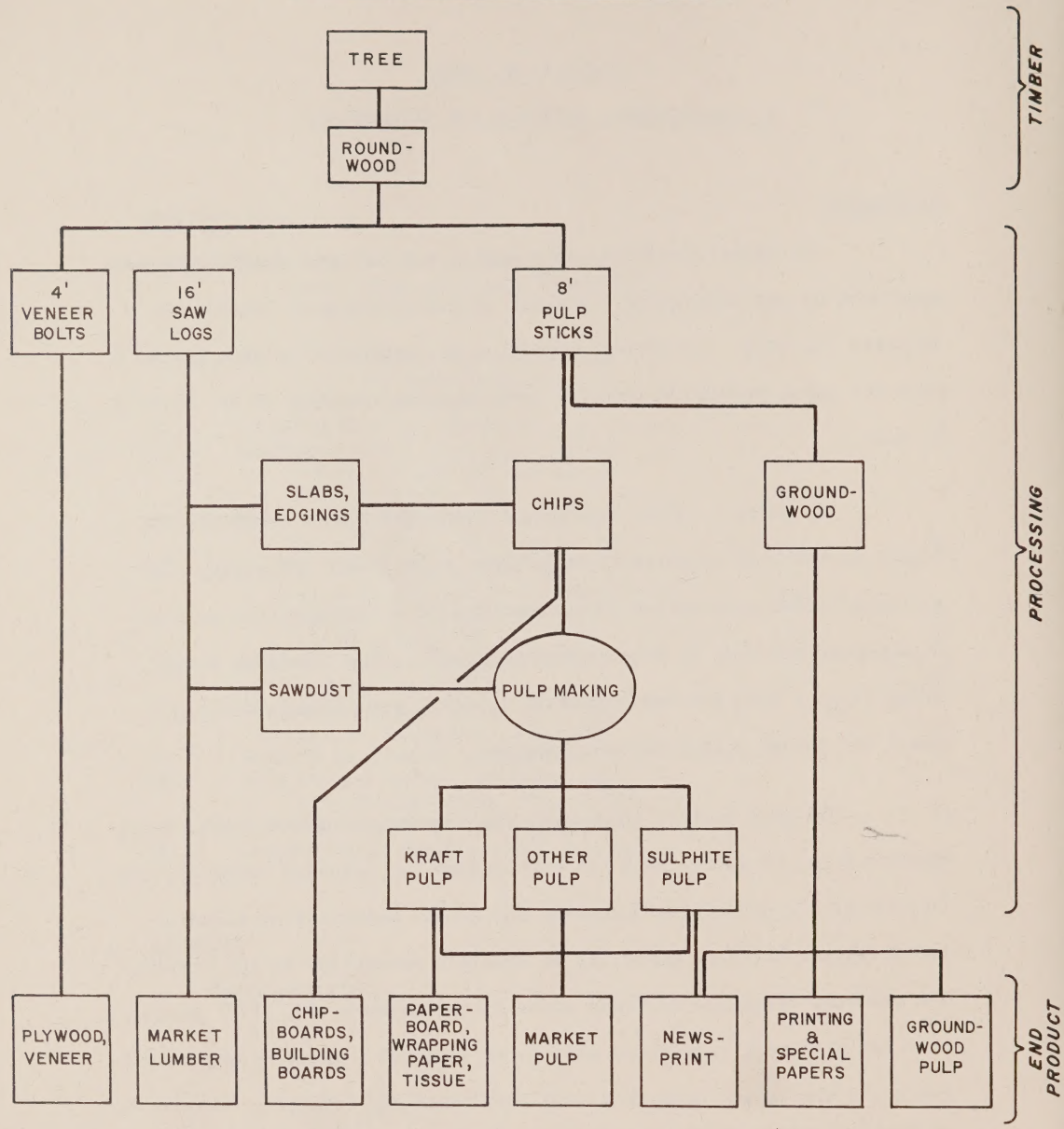
The Select Committee on Economic and Cultural Nationalism was appointed by the Legislative Assembly of the Province of Ontario on December 17, 1971. The Select Committee is composed of eleven M.P.P.'s from the three Provincial Parties under the chairmanship of Mr. Russell D. Rowe.

On March 1, 1972, the Select Committee tabled a Preliminary Report in which it proposed to undertake, among other activities, "a policy-oriented examination of nationalism in relation to the cultural industries, and from an Ontario perspective"¹. The Committee also referred to a need for assistance in developing a reliable factual basis for future policy recommendations.

To help fulfill this need, the Committee engaged Kates, Peat, Marwick & Co., together with its sub-contractor, Canadian Facts Co. Ltd., to conduct a study of the perceived and actual behaviour of Canadian- and foreign-controlled companies in specific industries in the province². The terms of reference for this study (dated November 30, 1972) stated that six different industries were to be selected jointly by the consultants and the Select Committee, and that these six industries were to be

-
1. Select Committee on Economic and Cultural Nationalism, Preliminary Report (Toronto: Queen's Printer, 1972), P. 12
 2. "Control", for the purpose of this report, is defined as 51 per cent or greater ownership of voting shares.

FROM TREE TO END PRODUCT



representative of the service, manufacturing, and resource areas of the Ontario economy.

One group of industries selected was the forest-based industries. These industries were chosen because they make a major contribution to the economic life of the province. They are important consumers of a valuable, renewable natural resource, and they provide the major employment base for many communities. In addition, they supply a significant proportion of Canada's total exports (12.5 per cent in 1970). Of particular interest in the context of the Select Committee's objectives is the fact that foreign-owned companies account for approximately 45 per cent of the total sales of forest-based industries in the province, and they use over 40 per cent of all licensed forest areas in Ontario.

This report contains the findings of KPM&Co.'s sub-study of the forest-based industries.

APPROACH

Before outlining the focus of the sub-study, we shall review briefly the technology of the forest-based industries. (This is illustrated by the simplified flow chart in Exhibit 1, opposite.)

The manufacturers of forest products either harvest their trees in designated woodland areas (timber limits) or purchase their wood from independent loggers. After the standing timber has been felled, the branches and tops of the trees are trimmed and the remaining logs, or

roundwood, are transported in tree lengths or cut on site into lengths that are suited to a particular mode of transportation or to the intended end use of the wood.

The species and diameter of the harvested tree determine its use in the various manufacturing processes that follow. For example, roundwood with a large diameter and of superior quality is required for timber (saw logs) and veneer (bolts), while lower grade roundwood is suitable for pulpwood (sticks).

Processing at the mill transforms the saw logs into lumber, and the by-products are used for pulp making. Veneer bolts are shaved into veneer and plywood, and the centre parts are used either for other industrial purposes (e.g. cores for window blinds, broomsticks, etc.) or for pulp.

Pulp sticks are debarked and either broken into chips for further chemical processing or ground into groundwood. The chips undergo intense chemical treatment, and a large part of the material is dissolved. The main product from this process is kraft (sulphate) or sulphite pulp, depending upon the kind of chemical treatment that is applied. By-products of the process are usually discarded as waste, and it is these that are the source of water pollution attributed to the forest-based industries. A few mills use some components of the waste for the manufacture of chemicals.

Pulp is either sold directly as market pulp or processed further by paper making equipment. Kraft pulp is manufactured into paperboard, wrapping paper, and tissue; sulphite pulp is blended with groundwood for the production of newsprint.

There is an important trend among the forest based industries toward integrated utilization of wood products, so that all parts usable for lumber are so processed and all by-products of the sawmill are fed back into pulp and paper making. At present, there is conflict among industries between the two uses. Operators of small sawmills demand the best roundwood from the large pulp and paper companies that harvest their own supply; but the majority of these industries prefer to use all the available roundwood for the manufacture of pulp.

According to their respective roles in wood harvesting and processing, the forest-based industries can be subdivided, for analytical purposes, into the following groups:

- logging
- wood industries (such as sawmills and veneer and plywood manufacturing)
- paper and allied products.

In Ontario, the logging industry and the paper and allied product manufacturers are the most important contributors to the economy. The latter was responsible for 63.3 per cent of forest utilization in the Province. This sub-study therefore focuses on the pulp and paper

companies and their logging operations, and places relatively less emphasis on the wood manufacturing industries.

EXHIBIT 2

MEASUREMENT UNITS OF FOREST-BASED INDUSTRIES IN ONTARIO

1 cord roundwood	=	118 cubic feet delimbed timber, stacked
1 cunit	=	100 cubic feet of solid wood
	=	approximately 1.18 cords
1 board foot	=	1 square foot x 1 inch

METHODOLOGY

A standard basic methodology was applied to all six industry sub-studies. It contained the following stages:

1. Selection of four to six companies in an industry sector that may be considered "typical" of the major companies in the industry in terms of foreign/Canadian ownership mix, size, and scope of operations.³
2. Investigation in depth of their corporate behaviour on the basis of factual information derived from and about each company.
3. Comparison of the foreign- and the Canadian-controlled companies in the sample to determine the effects, if any, of foreign ownership.
4. Comparison of attitudes among both top management and employees of foreign- and Canadian-controlled companies.

-
3. It is recognized that this sample is too small to be statistically representative.

5. Review of industry statistics and conducting of further interviews to assist the analysis of the effects of foreign ownership on the industry.
6. Report on findings regarding company behaviour and management/employee attitudes.

One rationale for in-depth examination of a few companies (the essential element of all the industry sub-studies), rather than a statistically oriented study of a greater number, is based on the assumption that a company case study approach will identify the most important business characteristics of any given industry. That is, the norms, traditions, and business practices governing relationships between purchaser and seller are believed to be similar for any given company operating in an industry.

In all the sub-studies, available background information on the characteristics and economics of the industry as a whole was analyzed and further interviews conducted were appropriate.

Forest-based Industries

The data for this sub-study are drawn from five main sources:

1. Government statistics
2. Government working papers and reports
3. Submissions from industry associations
4. Personal interviews with
 - Federal Government officials
 - Ontario Government officials
 - executives and members of industry associations

- suppliers to the industries
- executives and employees of five selected companies (two Canadian and three foreign-owned)
- community leaders and the general public in four small towns or cities.

5. Responses of corporations to a confidential questionnaire.

In-Depth Study

The main direction of the study was to establish whether or not significant differences exist in the behaviour of firms in the forest-based industries which can be attributed to ownership. To this end, an in-depth study was made of five selected firms, representing a cross-section of this sector in Ontario. Three firms are foreign-controlled and two have over 90 per cent Canadian ownership. One firm is in the lumber and plywood business, one is a specialized producer of newsprint, one produces tissue and two are integrated companies encompassing a variety of fields in the industry. Three companies have their head offices in Ontario and two in other provinces. Confidentiality requirements preclude the provision of more specific details on characteristics of the related firms.

Three methods were used for information gathering:

1. Factual (statistical) questionnaires
2. A judgemental (opinion) questionnaire
3. Personal interviews.

The main sources of information were the personal discussions held with representatives of each firm; the questionnaires were designed to establish a basis for structured comparison of the selected firms, to permit us to draw conclusions regarding the effect of ownership. The questionnaires were organized in such a way as to allow comparisons with other industries which are subject to the investigation of the Select Committee.

Because the activities of the selected firms were rather different, we decided to issue separate, tailor-made questionnaires to each firm (these are reproduced in the appendix to this report). To maintain confidentiality, specific references to individual firms have been deleted.

Typically, a set of interviews involved, first, an informal discussion with the top executive or a vice-president to whom contact with us was delegated. At that time, we discussed the factual and judgmental questionnaires and left a blank copy of each with the company. During this interview, we usually discussed questions which were not directly related to the company but encompassed problems concerning the Canadian economy, foreign ownership, and its influence in Canada. After agreeing on a time for company staff to answer the factual questions and establishing contact for eventual technical discussions of the factual questionnaires, we arranged for more detailed interviews with executives in charge of specific operations, such as woodlands, pulp and paper making, and fine papers.

While the answers for the factual questionnaires were being prepared, we carried out a second set of personal interviews with corporate executives. At this time, we went through the judgemental questions; and at the end of the interview, we checked our interpretation of the answers with the executives. The responses to the factual questionnaires were sent to us, checked, discussed with the technical personnel, and evaluated.

To cross-check some of the factual answers, we interviewed federal and provincial authorities, particularly on the subject of anti-pollution activities, employment stability, and husbandry of forest resources. The results of the factual and judgemental questionnaires were listed on worksheets. The conclusions drawn in Section III of this report are based on the evaluation of the summarized answers and the content of the personal interviews.

STUDY ORGANIZATION

The forest-based industries sub-study was directed and conducted primarily by a partner of KPM&Co. with the assistance of a member of the firm's accounting and financial information professional staff. Additional research staff also participated in the data collection and compilation process.

This is one of six industry sub-studies to be reported on the Select Committee. Efforts have been made to maintain a consistent approach to all the sub-studies. Meetings have been held regularly with

the other sub-study directors, and a common methodology has been followed for all sub-studies.

Canadian Facts Co. Ltd. participated as sub-contractor in the employee attitude survey for all six industries included in the overall study. The questionnaire was developed and administered by Canadian Facts with specific input from KPM&Co. in a number of areas - in particular, the hypotheses developed for the industry-specific Section C. The analysis of the results for the forest-based industries sub-study questionnaire was primarily the responsibility of KPM&Co.

Report Organization

The report of the sub-study on the forest-based industries is organized as follows. First, a profile of these industries is presented, with an analysis of the degree of foreign ownership and indicated patterns of change. Second, behavioural and attitudinal differences within the industries are examined, with specific emphasis on the extent to which these may be attributed to foreign as opposed to Canadian ownership. Finally, a brief summary is presented, containing our conclusions and a brief discussion of policy implications.

II - THE IMPORTANCE OF FOREST INDUSTRIES
TO CANADA AND ONTARIO

Canada has 10.0 per cent of the productive forest areas of the world and supplies approximately 8.8 per cent of the total round-wood production. Canada's relative position regarding the production of pulp and newsprint in the world is shown in Exhibit 3 below:

EXHIBIT 3

PULP AND NEWSPRINT PRODUCTION AND EXPORT,
CANADA AS PERCENTAGE OF WORLD, 1950-1970

	<u>Wood Pulp</u>		<u>Newsprint</u>	
	<u>Production</u>	<u>Export</u>	<u>Production</u>	<u>Export</u>
1950	22.2	29.3	55.4	81.9
1960	17.2	24.3	45.1	76.1
1970	16.0	30.2	38.2	69.6

Source: Canadian Pulp and Paper Association, Reference Tables, 1972 (CPPA-RT 71).

The importance of pulp and paper to the Canadian economy is illustrated in Exhibit 4, following:

EXHIBIT 4

CONTRIBUTION OF PULP AND PAPER INDUSTRY
TO CANADIAN ECONOMY, 1950-1970

	<u>Goods of Own Manufacture</u>	<u>Percentage of GNP</u>	<u>Exports</u>	
	<u>M \$</u>		<u>M \$</u>	<u>Percentage of Canadian Total Exports</u>
1950	954	5.2	714	22.9
1960	1,583	4.3	1,124	21.4
1970	2,685	3.0	2,063	12.5

Source: CPPA - RT-71)

EXHIBIT 5VALUE ADDED AND EMPLOYMENT IN
FOREST AND ALLIED INDUSTRIES,CANADA AND ONTARIO, 1970

	<u>Value Added</u>		<u>Employment</u>	
	<u>Manufacturing</u>		<u>Total</u>	
	<u>Activity</u>	<u>%</u>	<u>Activity</u>	<u>%</u>
	(Million \$)*		(Employees)	
<u>CANADA</u>				
Logging	683	26.7	52,230	26.8
Sawmills, planing, shingle, veneer and plywood mills	553	21.6	62,485	32.0
Pulp and paper mills	<u>1,323</u>	<u>51.7</u>	<u>80,371</u>	<u>41.2</u>
Total	<u>2,559</u>	<u>100.0</u>	<u>195,086</u>	<u>100.0</u>
<u>ONTARIO</u>				
Logging	110	21.4	9,567	24.3
Sawmills, planing, shingle, veneer and plywood mills	62	12.0	7,644	19.4
Pulp and paper mills	<u>343</u>	<u>66.6</u>	<u>22,201</u>	<u>56.3</u>
Total	<u>515</u>	<u>100.0</u>	<u>39,412</u>	<u>100.0</u>
<u>ONTARIO AS % OF CANADA</u>				
Logging	16.1		18.3	
Sawmills, planing, shingle, veneer and plywood mills	11.2		12.2	
Pulp and paper mills	25.9		27.6	

Source: Statistics Canada, Catalogue 25201/35204/35206/ and 36204/1970

* Canada Currency

The relative importance of various branches of the forest-based industries in terms of value added and employment is shown in Exhibit 5, opposite.

Ontario's share of the Canada's forest wealth is shown in Exhibit 6, below:

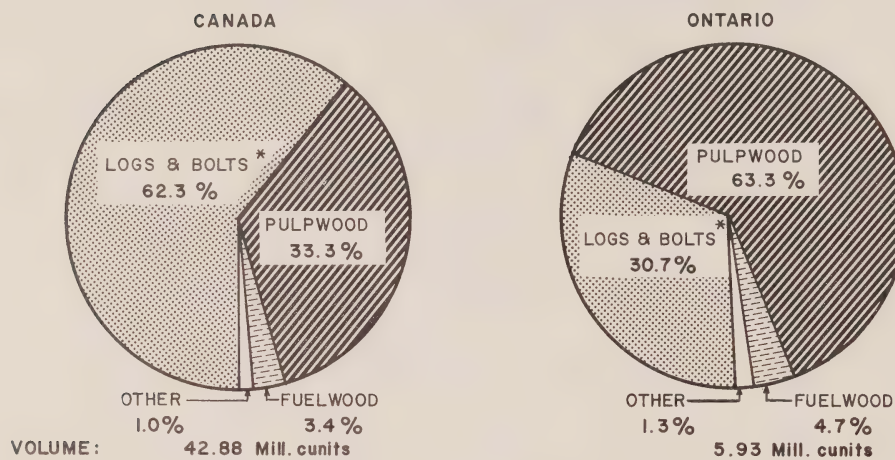
EXHIBIT 6

FOREST WEALTH, CANADA AND ONTARIO, 1970

	Forest (sq. mi.)	Merchantable Timber (million cu./ft.)	Roundwood Harvest (\$ million)
Canada	1,244,292	629.4	1,619.6
Ontario	<u>188,335</u>	<u>111.4</u>	<u>184.5</u>
Ontario as percentage of Canada	15.1%	17.6%	11.4%

Source: Statistics Canada

The utilization of forest products in Ontario is different from the Canadian average. As shown in Exhibit 7, below, the province produces mainly pulpwood; the rest of the country (dominated in this field by British Columbia) harvests better-quality roundwood in the form of logs and bolts and uses it for lumber and plywood. The reason for this discrepancy is that climatic and soil conditions differ in the two provinces. Milder weather and more and better-distributed precipitation in British Columbia stimulate more vigorous growth than occurs in Ontario. Special species (such as the Douglas fir) grow to sizes unknown in the eastern provinces, and trees of other, more common

EXHIBIT 7FOREST UTILIZATION , CANADA AND ONTARIO , 1970

* Includes some wood in pulp manufacture

SOURCE: Statistics Canada 25201

species provide better raw material for lumber because of their greater girth and length. Exhibit 8, below shows the size class distribution of marketable timber for six regions in Canada.

EXHIBIT 8CANADAREGIONAL SIZE CLASS DISTRIBUTION OF TIMBER
BY DIAMETER AT BREAST HEIGHT (DBH)(Based on 1963 National Forest Inventory,
Softwood and Hardwood Combined)

Region	Percentage of Total for Canada			10" DBH+ as a
	4"-9" DBH	10" DBH+	Combined	Percentage of Total
(a)				(c)
British Columbia	26	64	50	81
Prairie Provinces	20	7	12	38
Ontario	24	10	15	42
Quebec	12	16	14	71
Atlantic Provinces (b)	10	3	6	32
Yukon and N.W.T.	<u>8</u>	<u>*</u>	<u>3</u>	<u>9</u>
Total Canada	100	100	100	64

(a) Including immature volumes. (c) Virtually all softwood.

(b) Including Labrador. (d) Proportion of softwoods
is about 66 per cent.

* Less than one-half of one per cent.

Sources: Economic Indicators in Forestry and Forest-based
Industries in Canada: 1961/69 (James G. Bowland,
Forest Research Institute, Canadian Forestry Service,
Department of the Environment, 1971).

The distribution of marketable timber by species is shown in
Exhibit 9, overleaf.

Of the 180,588 square miles of forest land not reserved for
parks and conservation areas in Ontario, approximately 89 per cent is provincial
Crown land, 1 per cent is federal Crown land, and 9.9 per cent is
privately owned.

EXHIBIT 9

MERCHANTABLE TIMBER BY SPECIES, CANADA AND ONTARIO, 1968
 (INVENTORIED NON-RESERVED FOREST LAND ONLY)

<u>Species</u>	<u>Canada (a)</u>	<u>Ontario</u>	
	<u>Million cu.ft.</u>	<u>Million cu.ft.</u>	<u>Percent of Canada</u>
<u>Softwoods</u>			
Spruce	204,964	37,412	18.3
True firs	92,842	6,751	7.3
Douglas fir	19,142	-	-
Hemlock	61,433	1,128	1.8
White pine	6,032	3,150	52.2
Red pine	1,221	900	73.7
Jack and lodgepole pines	77,019	14,792	19.2
Ponderosa pine	348	-	-
Cedar	34,478	2,317	6.7
Larch (Tamarack)	728	-	-
Yellow cypress	4,084	-	-
Other softwoods	592	143	24.2
Total	502,883	66,593	13.2
<u>Hardwoods</u>			
Poplar	61,892	21,174	34.2
White birch	27,370	11,963	43.7
Yellow birch	12,028	3,349	27.8
Maple	16,372	5,630	34.4
Beech	2,995	490	16.4
Elm	892	829	92.9
Ash	898	461	51.3
Basswood	767	298	38.9
Oak	476	396	83.2
Other hardwoods	2,825	240	8.5
Total	126,515	44,830	35.4
Total all species	629,398(b)	111,423	17.7

(a) Excluding Labrador, Yukon, and Northwest Territories, where no complete inventories are available.

(b) On 445.1 million acres of inventoried forest land (506.9 million acres less 61.8 million acres of immature forests in British Columbia, as reported in source document).

Source: Glen H. Manning and H. Rae Grinnell, Forest Resources and Utilization in Canada to the Year 2000, Environment Canada, Forestry Service, 1971. (Data supplied by the provinces.)

The relative contribution of Ontario to Canada's production of paper products is shown in Exhibit 10, below.

EXHIBIT 10

MILL SHIPMENTS OF PAPER AND PAPERBOARD, CANADA AND ONTARIO, 1970

	<u>Canada</u>		<u>Ontario</u>		
	<u>'000 Tons</u>	<u>Percentage of Total</u>	<u>'000 Tons</u>	<u>Per cent</u>	<u>Percentage of Canada</u>
Newsprint	8,764	72.3	1,854	60.4	21.2
Book and Writing	880	7.3	505	16.5	57.4
Wrapping	484	4.0	69	2.3	14.3
Paperboards	1,764	14.6	566	18.4	32.1
Tissue and Sanitary	118	1.0	61	2.0	51.7
Other	108	.9	16	.5	14.8
TOTAL	12,118	100.0 ^(a)	3,071	100.0 ^(a)	25.3

(a) Percentages total more than 100.0 because of rounding errors.

Source: Statistics Canada, Catalogue 36204/1970

Production data of roundwood and lumber for the past two decades are presented in Exhibit 11, below.

EXHIBIT 11

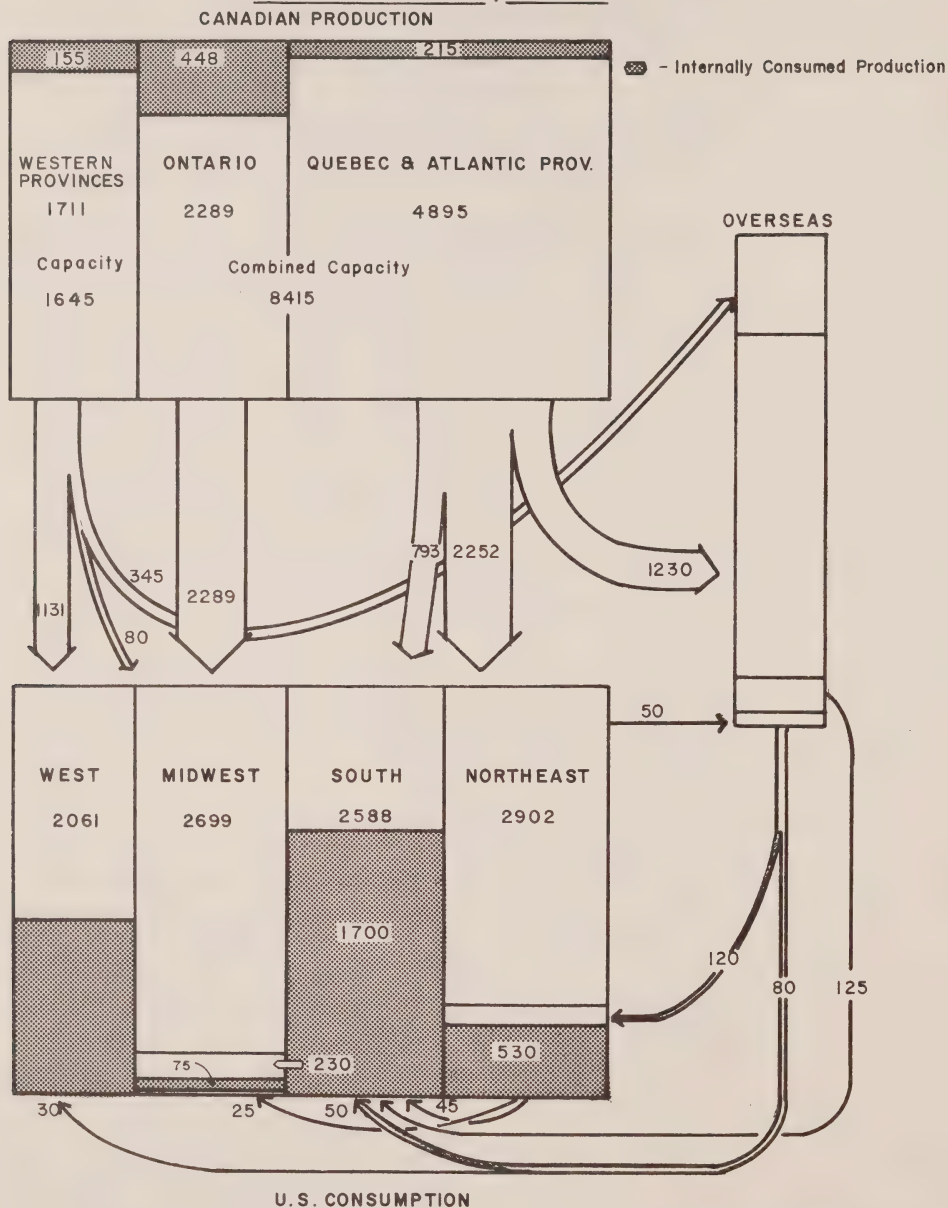
PRODUCTION OF ROUNDWOOD AND LUMBER, ONTARIO, 1951-1970

	<u>Roundwood</u>		<u>Lumber</u>	
	<u>Ontario Volume (million cu.ft.)</u>	<u>Percentage of Canadian Volume</u>	<u>Ontario Volume (million bd.ft.)</u>	<u>Percentage of Canadian Volume</u>
1951	600	17.5	821	11.8
1961	494	15.6	641	7.8
1970	593	13.8	961	7.5

Source: Statistics Canada Catalogue 25202, 25204, 35002, 35003.

ESTIMATED NORTH AMERICAN NEWSPRINT MARKETS AND PRODUCTION FLOWS

ESTIMATES FOR 1970, 1000 TONS *



Internally Produced Consumption (hatched area)

* AS THE CHART IS BASED ON ESTIMATES FOR 1970 AND NOT STATISTICS CANADA PUBLICATIONS, THE PRODUCTION FIGURES DO NOT ADD UP TO THOSE QUOTED IN OTHER PARTS OF THIS REPORT

SOURCE: Estimates of R.A. DALY & COMPANY LIMITED

Kates, Peat, Marwick & Co.

The data indicate that Ontario was in some categories able to maintain, and in some categories increase its volume production, but its percentage of share total Canadian production declined severely. This decline reflects the rapid growth of production in British Columbia, resulting from the increasing exploitation of the province's superior forest resources. The Prairie and Atlantic provinces also increased their share as these regions experienced further resource development.

The pattern in pulp and paper products is similar to that observed in roundwood and lumber: increasing volumes but decreasing market shares. Exhibit 12, below illustrates this behaviour.

EXHIBIT 12

ONTARIO'S SHARE IN CANADA'S PRODUCTION

	Volume '000 Tons		Percentage of Canada	
	<u>1949</u>	<u>1970</u>	<u>1949</u>	<u>1970</u>
Woodpulp	2,138	3,957	27.2	23.2
Paper and Paperboard	1,718	3,178	43.9	25.6
Newsprint	1,224	1,858	23.6	21.1

Source: Statistics Canada, Catalogue 25201/35204/35206
and 36204/1970

Exhibit 12(a), opposite, shows in the form of a spatial diagram the estimated North American newsprint production and consumption flows. It can be observed that Ontario produces newsprint for itself and exports a large quantity to the Midwestern United States. With only slight oversimplification, it can be said that Ontario is an exclusive supplier

EXHIBIT 13

NUMBER OF ESTABLISHMENTS AND EMPLOYEES IN THE FOREST AND ALLIED INDUSTRIES, ONTARIO, BRITISH COLUMBIA, AND CANADA, 1963 AND 1970

	Forest and Allied Ind.		Pulp and Paper Mills		Logging		Sawmills, Planing, and Shingle Mills		Veneer and Plywood Mills	
	Estab.	Empl./ Employees Est.	Estab.	Empl./ Employees Est.	Estab.	Empl./ Employees Est.	Estab.	Empl./ Employees Est.	Estab.	Empl./ Employees Est.
1963 Ontario	979	38,864 39.7	38	20,109 529.2	472	10,816 22.9	441	5,116 11.6	28	2,823 100.8
Canada	6260	187,753 30.0	126	65,040 516.2	2959	60,291 20.4	3094	49,438 16.0	81	12,984 160.3
Ontario as % of Canada	15.6%	20.7%	30.2%	30.9%	16.0%	17.9%	14.3%	10.3%	34.6%	21.7%
1970 Ontario	831	39,412 47.4	36	22,201 616.7	474	9,567 20.2	292	5,351 18.4	29	2,283 78.7
British Columbia	1627	67,281 41.4	20	14,831 741.6	1185	18,581 15.7	394	26,883 68.2	28	6,986 249.5
Canada	4654	193,636 41.6	139	80,371 578.2	2653	52,230 19.7	1772	48,776 27.5	90	12,259 136.2
British Columbia as % of Canada	17.9%	20.4%	25.9%	27.6%	17.9%	18.3%	16.5%	11.0%	32.2%	18.6%

Kates, Peat, Marwick & Co.

Source: Statistics Canada Catalogue 25202/25204/35002/35003

of the U.S. Midwest and that the Midwest is the exclusive consumer of Ontario's newsprint outside the province. This situation is dictated by market forces and particularly by transportation costs. The Great Lakes offer the cheapest possible mode of transportation between Ontario and the Midwest during the open season, and reasonably short railway hauls are available for the winter months.

This mutual reliance is the strongest market link between any newsprint producer and consumer area in North America or, more broadly speaking, on the world market. About 84 per cent of all Ontario's newsprint production is estimated to go to the Midwest; conversely, approximately 82 per cent of the Midwest's consumption is estimated to originate in Ontario.

About 59 per cent of the newsprint produced in the western provinces is consumed by the western United States. The main market for newsprint manufactured in Quebec and the Atlantic Provinces is the north-eastern United States, where approximately 46 per cent of their total production is consumed. Ontario's heavy reliance on a single market represents a weakness; any softening of this demand (e.g. as a result of intrusion by producers in the U.S. southeast) could force the province to seek more remote markets, thereby incurring higher transportation costs and significantly decreasing Ontario's competitive position.

Exhibit 13, opposite, shows the relative position of Ontario in all sub-industries of the forest and allied industries group in Canada, in terms of establishments and employment. The table indicates

that logging and pulp and paper mills in Ontario are close to average regarding the number of employees per establishment; but in sawmills and in veneer and plywood mills, Ontario plants are significantly smaller than the national average and particularly than those in British Columbia.

MARKET POSITION

Because over 66 per cent of the total production value of Ontario's forest industries is provided by the pulp and paper industry, we will limit our description of market position to this important segment.

In newsprint, there has been a dramatic turnaround in the market since mid-1972. In the late 1960's and early 1970's, supply grew faster than demand. At that time, the posted list price for newsprint of \$165 per ton was not truly indicative of market value, because it was subject to a discount of \$10 to \$15. Some firms gave direct discounts; others offered share options for major contracts or leased their newsprint-making paper machines to their major publisher customers at advantageous rates. This latter solution not only provided the publishers with shares in profits equivalent to the \$10-\$15 per ton discount, but also gave them a large degree of direct control over their Canadian suppliers.

U. S. publisher influence is shown by the representation of American newspapers on the board of directors of Canadian pulp and paper companies. For example, the New York Times Company is represented

on the Board of Directors of Gaspesia Pulp and Paper Company Limited and Spruce Falls Power and Paper Company Limited by Messrs. A. O. Sulzberger (President), Harding F. Bancroft (Executive Vice-President), and Francis A. Cox (Vice-President).

In 1972, demand for newsprint caught up to supply; and barring a world-wide economic depression, the future for the industry over the next few years is bright. For example, newsprint consumption is closely related to advertising and is directly affected by any shift either in total spending on advertising or in distribution among the media. Currently, there is some pressure on the television industry to limit the proportion of viewing time given over to advertising. This may result in some increase in use of printed advertising and a possible increase in the demand for newsprint. There seems to be little probability of a shift in the opposite direction.

On the production side, very little new capacity for newsprint is under construction in the world. The United States has steadily increased the supply from its own mills from 18 per cent of its own consumption in 1952 to 33 per cent in 1971. With demand outstripping supply, it may well be forced to import an increasing volume of newsprint in the years to come. This will tend to produce better operating rates in Canadian mills and, potentially, further investment in Canada. This latter factor depends very much upon the competitive position of the Canadian-based industry in relation to investment in the United States or other countries. The value of the Canadian dollar also may be a determining factor.

The pulp and paper industry in eastern Canada faces entirely different problems than those of the industry in British Columbia. For this reason, we will handle the eastern market separately and briefly compare the competitive position of Ontario-based mills with that of other producers for the Ontario and U.S. markets.

The main source of competition in the U.S. market, which takes about 79 per cent of Canada's production, comes from the southeastern United States, where the growing conditions for forests are much more favourable than those in Ontario and where, at present, there is a larger supply of labour. The picture does not seem to be particularly promising for Ontario as current cost comparisons are unfavourable.

There is a possibility that entirely new technologies will be developed for pulp and paper making, such as the use of tropical hardwood and/or bagasse (a by-product of sugar cane processing). This also could weaken Ontario's competitive position, to an unpredictable extent.

PRODUCTIVITY AND COSTS

The productivity improvement of the pulp and paper industry in Canada compares unfavourably with the trends of its competitors in the United States and also with other industries in Canada. As shown in Exhibit 14 below, while Canadian manufacturing as a whole narrowed the productivity gap with the United States, pulp and paper fell significantly behind.

EXHIBIT 14

VALUE ADDED BY ALL MANUFACTURING AND
BY PULP AND PAPER INDUSTRIES, CANADA AND THE UNITED STATES,
1963-1967

(In dollars per man-hour)

	<u>Canadian Currency for Canada, U.S. Currency for U.S.</u>			<u>U.S. Currency for U.S.</u>		
	<u>Total Manufacturing</u>			<u>Pulp and Paper Mills</u>		
	<u>Canada</u>	<u>U.S.</u>	<u>U.S./Canada Per cent</u>	<u>Canada</u>	<u>U.S.</u>	<u>U.S./Canada Per cent</u>
1963	6.02	7.84	130.2	7.77	9.05	116.5
1967	7.11	8.99	126.4	7.88	10.89	138.2

Source: Comparative tables of Principal Statistics and Ratios for Selected Manufacturing Industries (Canada and United States 1967, 1963 and 1958, Department of Trade and Commerce, April 1971.

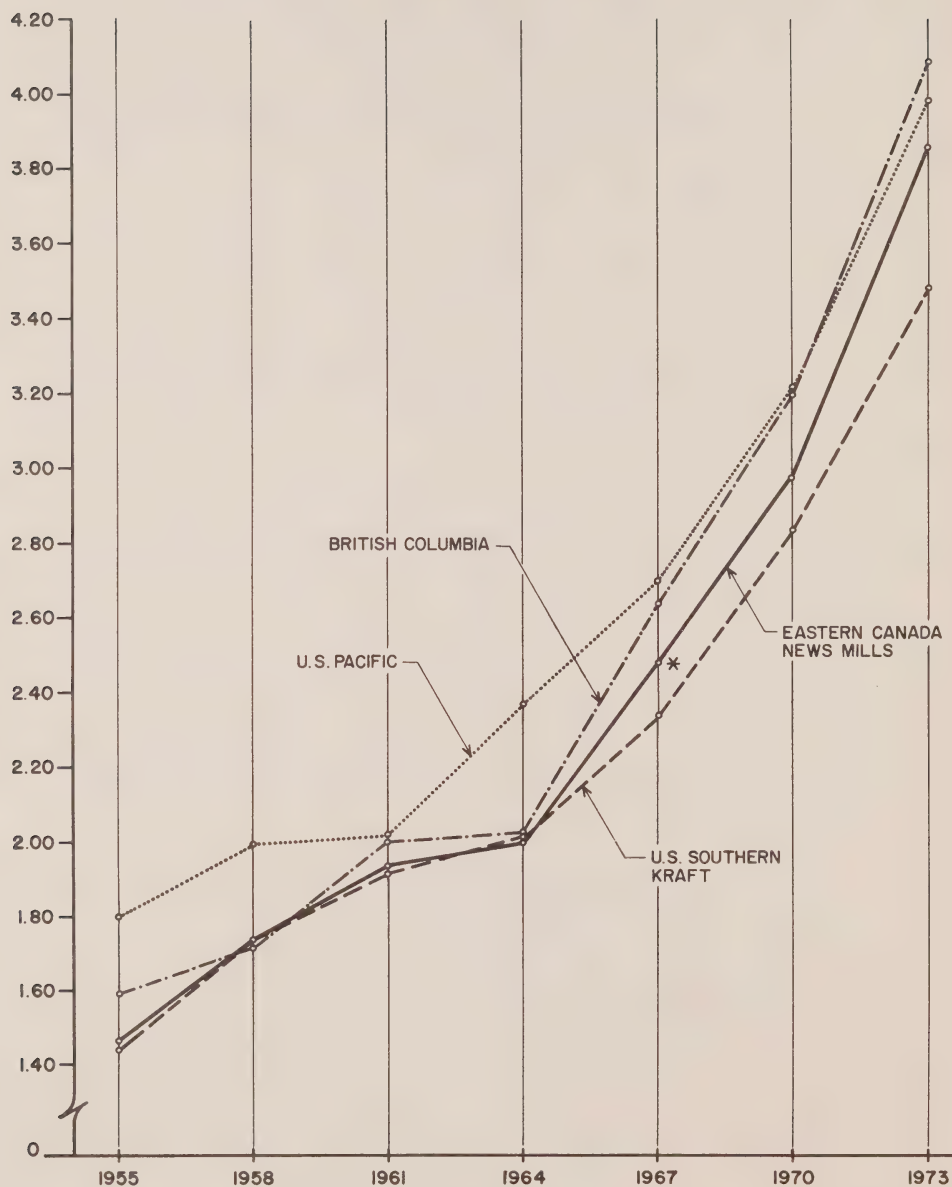
In the relative increase of productivity indices in the 1961-1969 period, pulp and paper ranked sixty-sixth out of eighty-seven Canadian manufacturing industries.

Wage rates not only grew faster in Canada than in the United States but actually by-passed the U.S. rates, as indicated in Exhibit 15, overleaf. Hourly wages increased from 1955 to 1973 by the following multipliers:

Eastern Canada News Mills	2.64
U. S. Southern Kraft	2.42
British Columbia	2.57
U.S. Pacific	2.21

PULP AND PAPER INDUSTRY BASE LABOUR RATES

\$ / HOUR



* FROM 1967 ON EASTERN CANADA NEWS MILLS BASED ON A SEVEN-DAY WEEK.

SOURCE: Canadian Pulp and Paper Association Basic wage rates

Kates, Peat, Marwick & Co.

During the same period, both the foreign exchange value and the purchasing power of the Canadian dollar improved as compared with those of the U.S. dollar. These factors resulted in an even greater real increase in Canada.

EXHIBIT 16

BASE LABOUR RATES \$/HOUR

	<u>Canada</u>		<u>United States</u>	
	<u>Eastern Newsprint</u>	<u>British Columbia</u>	<u>Southern Kraft</u>	<u>Pacific Coast</u>
January 1955	1.46	1.59	1.44	1.80
July 1973	3.85	4.09	3.485	3.98
Increase	164%	157%	142%	137%

Source: Canadian Pulp and Paper Association, Basic Wage Rates 1953-1974.

To establish whether or not the data in Canada and in the United States refer to comparable job descriptions, we have requested and received confidential information from individual firms. Detailed analysis indicates that the wage differentials do reflect comparable positions.

Exhibits 15 and 16 strongly suggest that the reversing differential between U.S. and Canadian wages is typical for all comparable regions. Hourly wage rates have grown at a faster pace in Canada than in the United States, both on the west coast of the continent, where the industry has enjoyed a booming expansion period, and in the east, where in Canada there has been relative stagnation as compared with substantial

industry growth in the U.S. southeast.

The combination of slower growth in productivity and a faster increase in wages, places Canada in an unfavourable competitive position, as is indicated by Exhibit 17 below.

EXHIBIT 17

WOOD COSTS PER 100 CUBIC FEET,
CANADA AND THE UNITED STATES, 1970

<u>Ontario</u>	<u>Quebec</u>	<u>British Columbia</u>	<u>Southeastern United States</u>
\$43.20	\$39.63	\$29.00	\$34.84

Source: The Pulp and Paper Industry in Ontario - A Need for Ontario Government Assistance, a submission by the industry, March, 1972.

The long railway distance to the U.S. Midwest from British Columbia provides Ontario with the necessary competitive advantage in this vital market for its forest products.

There is no consensus in the industry as to whether the relative and absolute advantage of the Southeastern United States can be expected to increase or diminish. Some experts hold the opinion that cheap labour in the Southeastern United States will disappear as social programs tend to minimize regional differences and to alter traditional employer practices. It is suggested that even now conditions are changing and that hourly wages will stabilize at or close to the levels existing in other, more highly developed regions of North America. Other experts have argued that the much faster growth cycle of southern pine as compared with trees in colder

climates gives the Southeastern United States a basic, long-term cost advantage. In addition, the level terrain of the region permits a high degree of mechanization in both planting and harvesting, thus making it possible to offset any substantial wage increases that may occur. The pulp and paper mills that operate on the rugged Canadian Shield do not have access to similarly economical alternatives to labour.

As well as occupying a highly competitive position in terms of production costs, the U.S. South enjoys a significant political advantage. Under circumstances of stress in the balance of payments position or if political difficulties arise, the United States Government may decide to foster self-sufficiency in a raw material which it may consider to be strategically important. Rapid development of resources in the southeastern United States could follow, in conjunction with decreasing imports of Canadian materials and manufactured goods.

Another competitive disadvantage for the Ontario industry is the distance from some of the richest potential markets. The railway rates are subject to revision and change and could be made part of government export policies. The other factor of transportation costs, the distance from mill to market, is fixed. Exhibit 18, overleaf, shows the transportation costs from eastern Canadian and United States mills to the major U.S. markets.

EXHIBIT 18

RAIL RATES FOR NEWSPRINT, 1971
 (Based on 140,000 lb. carloads)

To From	Miles	New York		Miles	Chicago		Washington	
		\$/2,000 lbs	¢/ton mile		\$/2,000 lbs	¢/ton mile	\$/2,000 lbs	¢/ton mile
Sault Ste. Marie, Ont.	895	23.40	2.61	471	11.40	2.42	24.00	2.56
Thunder Bay, Ontario	1,410	29.80	2.11	842	15.40	1.83	30.60	2.13
Grand'Mere, Quebec	466	18.80	4.03	877	24.60	2.81	22.60	3.38
Millinocket, Maine	542	16.80	3.10	1,241	25.80	2.08	21.40	2.83
Calhoun, Tenn.	818	22.80	2.79	620	16.20	2.61	12.83	2.18
Coosa Pines, Ala.	991	25.40	2.56	694	18.00	2.59	14.86	1.95

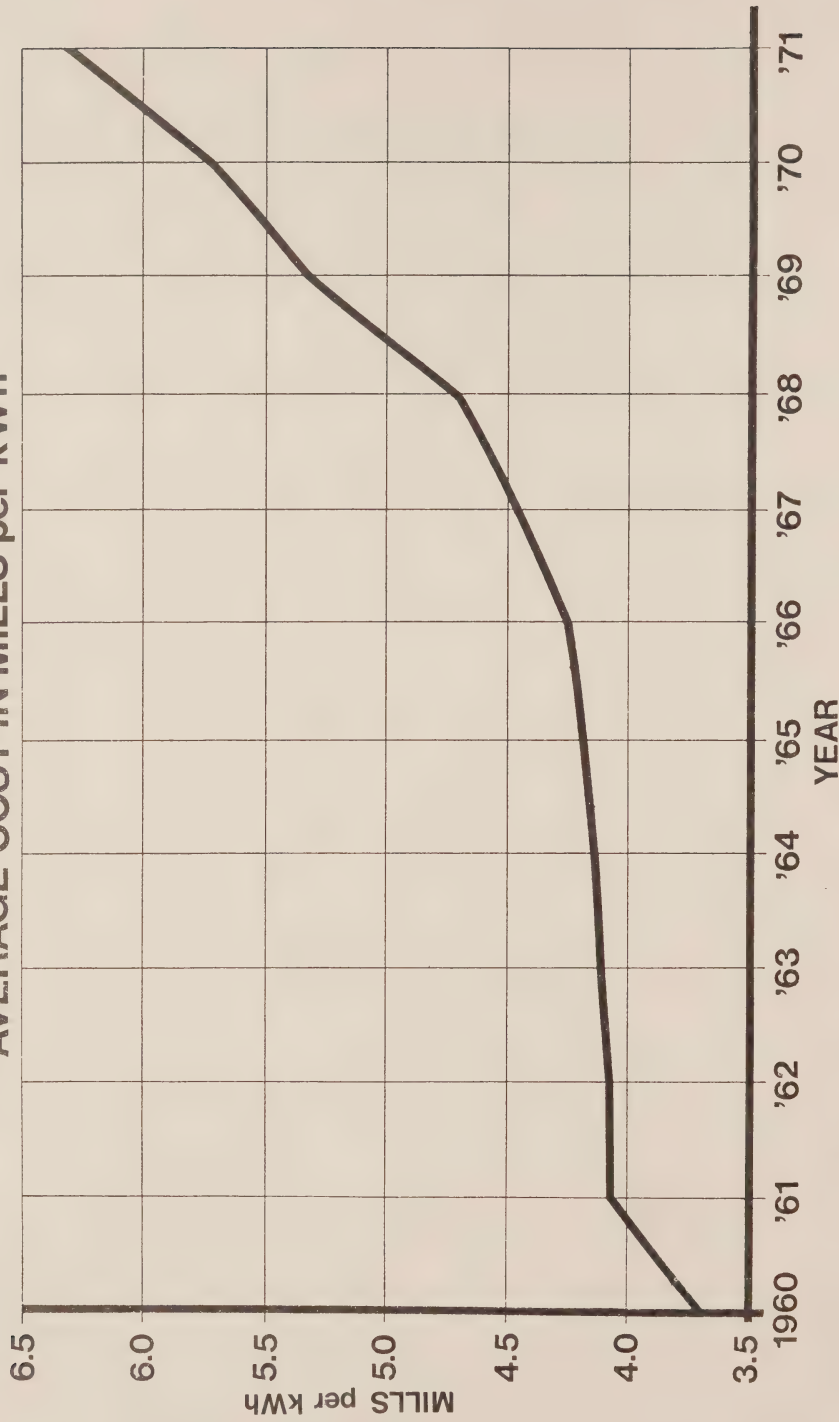
Source: Published railway rates at Ex Parte 267B level

One can conclude from Exhibit 18 that Ontario's mills are at a disadvantage in the New York area compared to their competitors. In the Chicago area Ontario mills enjoy an advantage although the U.S. Southeast is competitive if water transport is excluded. These cost figures explain the domination of the U.S. Midwest market by Ontario and the lack of penetration in other areas as shown in Exhibit 12.

The cost of electric power is a significant component of newsprint costs. According to a study by the Private Planning Association of Canada, approximately 1,600 kilowatt-hours of electricity are used in producing a ton of newsprint. At the typical price of six mills per kilowatt-hour, this represents about \$9.60 per ton of newsprint, or approximately 6 per cent of the price.

Pulp and paper producers in Ontario have been exposed to a steep increase in electricity costs in recent years. Exhibit 19, overleaf, indicates this trend. The reason for this abrupt price increase is a change in the concept of electrical power pricing on the part of Ontario Hydro. In the past, major producers using energy from cheap hydro-electric sources (near major waterfalls) enjoyed low power rates based on actual costs of generation and transmission. More recently, Ontario Hydro has evolved a pricing scheme based on a system of power districts and pooled costs. This means that all users served directly by Ontario Hydro (including large industrial consumers) are grouped together into power districts, regardless of their actual location. Transmission costs are pooled and charged

TREND OF PURCHASED POWER COSTS AT REPRESENTATIVE ONTARIO NEWSPRINT MILL , AVERAGE COST IN MILLS per kWh



Source: "The Pulp & Paper Industry in Ontario", a submission by the Industry in March, 1972

at a standard rate throughout the district, without taking into account the proximity of customers to the generating station. Components of the total charge other than transmission are based on the location of the customers in relation to the generating source. The cumulative effects of these costing and rate-setting policies have been to increase significantly the costs to major industrial users (mostly pulp and paper companies) who formerly enjoyed the total cost advantage of proximity to cheap sources of hydro-electric power, and to reduce prices to other consumers (such as municipalities and other residential and commercial users). Without questioning the logic of the power district and pooled cost concepts, it can be stated that their introduction has caused a deterioration in the competitive position of the hard-pressed pulp and paper industry. Exhibit 20 below presents a comparison of power costs to the pulp and paper industry in Ontario with those paid by its competitors.

EXHIBIT 20

POWER CONTRACTS 1972

<u>Power Authority</u>	<u>Contract Term</u> (Years)	<u>Load Factor</u> (%)	<u>Mills</u> Per kWh
Hydro Quebec	10	85	4.00
Hydro Quebec		85	5.73
British Columbia Hydro		90	5.52
New York State	30	90	3.00
New York State	5	85	4.80
Tennessee Valley	10	75	4.84
Bonneville	5	85	2.40
Bonneville	5-20	67.5	3.00
Gulf State Utilities		90	4.92
Texas	5	85	5.20
<u>Average</u>			<u>4.42</u>
Ontario Hydro (interruptible)	1	78	6.31
Ontario Hydro (firm power)		85	6.72

Source: Data provided by Ontario Hydro for meeting with Niagara Regional Government in August 1971.
Ontario Hydro Annual Reports.

EXHIBIT 21



* VALID UNTIL MARCH 31, 1973

SOURCE: The Ontario Forest Industry,
its Direct & Indirect Contribution to
the Economy
Ontario Department of Lands & Forests, 1969

Kates, Peat, Marwick & Co.

On balance, the outlook for the Ontario-based pulp and paper industry depends upon the basic relationship of demand for and supply of wood fibre. If consumption grows faster than production, the sheer availability of the province's forest resources will be enough to maintain the present volume of production or even to improve it. In case of a shift toward lower demand or the entry of new competitors, Ontario's industry may become significantly less than competitive because of its high costs.

REGIONAL IMPORTANCE
OF INDUSTRIES IN ONTARIO

In 1967, forest-based industries employed 2.6 per cent of the total labour force (73,557 workers) in Ontario. Approximately 19 per cent of these persons were employed in the northwestern region (see Exhibit 21 opposite), 21 per cent in the northeastern region, and 60 percent in the southern region. In 1964 (the last year for which in-depth analysis is available) in the northwest 69 per cent of manufacturing employment was wood oriented, as compared with 31 per cent in the northeast and 6 per cent in the south. Clearly, employment in these industries is not evenly distributed throughout the province, and any disruption in their operations would hurt the northwest critically while potentially causing only minor dislocation in the south.

The regional distribution of resources, employment, and production is shown in Exhibit 22 below.

EXHIBIT 22REGIONAL DISTRIBUTION OF RESOURCES, EMPLOYMENT, AND
PRODUCTION OF FOREST INDUSTRIES, ONTARIO 1967 (PER CENT).

	<u>North- western</u>	<u>North- eastern</u>	<u>Southern</u>	<u>Total</u>
Total area	60	28	12	100
Productive forest land	46	45	9	100
Merchantable timber	40	50	10	100
Roundwood production	41	37	22	100
Pulp production	52	34	14	100
Lumber production	13	52	35	100
Total employment	19	21	60	100

Source: The Ontario Forest Industry, its Direct and Indirect Contribution to the Economy, Ontario Department of Lands & Forests, 1969

For some areas, the regional concentration is even higher¹ than indicated by the table. According to a survey carried out in 1968, 57.0 per cent of full-time male employees in the Kapuskasing/Hurst area worked in forest-based enterprises; in Dryden, the proportion was even higher, at 57.3 per cent.

From these data, it is evident that the importance of the forest industries as employers in Ontario is accentuated by their concentration in the relatively underdeveloped areas of the province.

FOREIGN OWNERSHIP IN CANADA

The degree of foreign ownership and control in paper and allied industries in Canada was relatively stable during the 1950's and early 1960's but has increased noticeably since 1965, according to published statistics. It is exceedingly difficult to find a measure of foreign penetration that gives consistent figures over

1. The Ontario Forest Industry, its Direct and Indirect Contribution to the Economy, Ontario Department of Lands and Forests, 1969.

a longer time period. Statistics Canada publishes information on Canada's International Investment Position (CIIP) for forest-based industries dating back to 1954, but at the time of preparation of this report, 1968 was the latest year for which data were available. Under the Corporations and Labour Unions Returns Act (CALURA), information is given up to and including 1970, but starting only in 1965. Moreover, the statistics cited by CIIP and CALURA differ markedly, because they are based on different definitions. The CALURA figures are summarized in Exhibit 23 below.

EXHIBIT 23

OWNERSHIP AND CONTROL IN THE PAPER INDUSTRY, CANADA

1965 - 1970

	<u>Year</u>	<u>All Firms</u>	<u>Over 50% Foreign</u>		<u>U.S. Control</u>	
			<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Number of Firms	1965	440	88	20.0	NA	NA
	1967	438	88	20.1	NA	NA
	1968	447	94	21.0	63	14.1
	1970	476	106	22.3	70	14.7
Assets (\$ Million)	1965	4,954	1,952	39.4	NA	NA
	1967	6,053	2,343	38.7	NA	NA
	1968	6,404	2,529	39.5	1,980	30.9
	1970	7,084	3,200	45.2	2,227	31.4
Sales (\$ Million)	1965	3,260	1,349	41.4	NA	NA
	1967	3,844	1,459	40.0	NA	NA
	1968	4,216	1,634	38.8	1,318	31.3
	1970	4,458	2,034	45.6	1,460	32.7
Profits (\$ Million)	1965	438	168	38.3	NA	NA
	1967	312	95	30.4	NA	NA
	1968	297	119	40.1	108	36.4
	1970	231	109	47.2	97	42.0

Source: Statistics Canada, Catalogue 61210, 1970

A comparison of CALURA and CIIP data is shown in Exhibit 24, overleaf.

From these data, it can be concluded that Canadians control approximately 50-55 per cent of the assets of the pulp and paper industry. The trend up to 1970 was toward an increase in foreign ownership and control. Most of these changes took place outside Ontario: Finnish interests (Eurocan) expanded in British Columbia, a Swedish group moved into Nova Scotia (Nova Scotia Forest Industries), and some U.S. firms expanded in British Columbia (Weyerhaeuser in Kamloops) and in Quebec (Quebec North Shore at Baie Comeau).

In the newsprint industry, Canadian ownership extended to approximately 60 per cent of manufacturing capacity for all Canada. The comparable figure for Ontario was approximately 57 per cent.

One recent development (not yet shown in the tables) is the repatriation of foreign-owned companies by provincial governments after financial difficulties have been encountered by the original owners. Churchill Forest Industries in Manitoba, Labrador Linerboard in Newfoundland, and Columbia Cellulose and Crown Zellerbach's operation at Ocean Falls in British Columbia are the most important examples.

On the other hand, the known expansion plans of major U.S. corporations (ITT-Rayonier in Quebec and Procter & Gamble in Alberta) and the growth of Japanese capital (Daishowa in British Columbia) may indicate a trend toward increasing foreign penetration. Moreover, if the predicted shortage of fibre materializes, it is quite likely that U.S. publishers will attempt to secure their supply of newsprint by

buying Canadian-owned firms and/or establishing new mills in Canada. Similar action may come from American users of packaging material, who may diversify into kraft in Canada.

Foreign-owned corporations have not been significantly more profitable in recent decades than Canadian-owned companies, but they maintained a higher profit level in the depressed years of 1966-1971. The recovery in 1972 and 1973 has been rapid for the entire industry. The performance of some major corporations is shown in Exhibits 25(a) and 25(b), opposite.

In terms of the relationship between ownership and product type, it should be mentioned that no foreign-owned company has ventured into fine papers, the most labour-intensive area of the industry. The most likely explanation for this is that U.S. firms are able to supply their fine paper operations with U.S. fibre, and that they have come to acquire forest resources for the large-volume production of newsprint, kraft and pulp. Canadian companies, which historically have supplied the domestic market for fine papers, have survived under the umbrella of tariff protection.

FOREIGN OWNERSHIP IN ONTARIO

It is extremely difficult to separate from the available national statistics provincial data on the operations of Canadian- and foreign-owned companies. Rather than attempt this, in Exhibit 26 overleaf, we have listed the licensed areas of Ontario woodlands by

EXHIBIT 25(a)

PERCENTAGE RETURN ON ASSETS FOR MAJOR PULP AND PAPER COMPANIES, CANADA, 1963-1972

Year	CANADIAN-CONTROLLED FIRMS					FOREIGN-CONTROLLED FIRMS								Total
	Abitibi Paper	Consolidated Bathurst	Dontar	MacMillan Bloedel	MacLaren Paper	Price Co.	Great Lakes	Anglo-Canadian	Bowaters Mersey	Donohue Co. Ltd.	U.S. "X"	U.S. "Y"	International Paper (including U.S. operation)	
1963	14.7	11.2	7.3	19.7	10.0	6.9	20.6	12.7	5.2	17.4	17.6	8.2	12.5	11.8
1964	15.4	11.6	10.6	18.2	8.1	9.7	14.6	11.8	7.4	18.5	15.8	9.6	13.4	11.9
1965	12.4	10.5	9.2	16.7	10.2	7.8	14.9	11.8	7.0	17.5	17.4	15.6	13.2	16.2
1966	11.7	9.1	6.3	12.6	10.6	8.2	12.0	10.7	9.7	19.4	9.5	13.1	14.4	13.0
1967	8.7	5.4	3.1	10.5	7.5	6.4	9.6	5.6	8.0	10.2	11.0	14.5	11.0	13.4
1968	6.2	2.8	4.2	10.5	6.5	3.7	7.9	4.5	5.1	9.4	8.9	15.1	9.4	12.5
1969	6.4	3.5	6.3	10.9	7.2	5.2	10.9	4.9	7.7	8.2	10.8	10.7	10.0	10.8
1970	2.4	(1.5)	5.3	4.3	9.2	2.2	9.8	3.8	7.7	10.2	8.8	2.7	3.9	5.2
1971	2.0	(10.5)	2.3	5.6	5.1	.5	6.6	3.2	6.2	4.3	5.9	(1.8)	5.2	1.3
1972	3.6	2.6	5.4	7.8	6.1	4.1	3.4	3.7	-	8.7	3.9	1.3	7.7	2.3

Source: Annual reports for identified firms, and information collected on a confidential basis during the project for interviewed U.S.-owned firms "X" and "Y".

EXHIBIT 25(b)

NET INCOME BEFORE TAX FOR MAJOR PULP AND PAPER COMPANIES, CANADA, 1970-1973
(\$'000)

First Quarter	Abitibi Paper	Consolidated Bathurst	Dontar	MacMillan Bloedel	Donohue Co. Ltd.	Price Co.	Great Lakes	Anglo-Canadian	International Paper (including U.S. operation)
1970	-	3,299	6,300	15,700	1,270	3,346	-	1,275	42,210
1971	321	309	2,700	15,900	87	19	680	994	24,831
1972	566	1,915	5,200	16,400	568	1,367	112	973	31,567
1973	5,608	5,400	11,400	24,500	1,329	5,086	1,800	2,986	46,692

Source: Annual reports.

Kates, Peat, Marwick & Co.

EXHIBIT 26

LICENSED AREA BY OWNERSHIP

LICENSEE	PRODUCTIVE LICENSED AREA (Square Miles)				Overall Total	TOTAL LICENSED AREA (Square Miles)				
	Canadian-Controlled		Non-Canadian-Controlled			Canadian-Controlled		Non-Canadian-Controlled		
		%		%			%		%	
Pulp and Paper Mills	27,538	50.1	27,499	49.9	55,082	35,695	50.2	35,374	49.8	71,069
Sawmills*	3,854	49.8	3,882	50.2	7,736	4,766	52.0	4,404	48.0	9,170
Veneer Mills	594	67.0	292	33.0	886	700	68.5	322	31.5	1,022
Others**	14,753	100.0	-	-	14,753	17,669	100.0	-	-	17,669
Total	46,784	59.6	31,673	40.4	78,457	58,830	59.4	40,100	40.6	98,930

* With an annual production capacity of at least 10 million Ft.b.m.

** Represents issued timber licences not included in above categories.

Source: Internal memorandum by Resource Economics Branch, Ontario Department of Lands and Forests, March, 1972

Kates, Peat, Marwick & Co.

ownership. The figures indicate that areas serving pulp and paper mills and larger sawmills are distributed almost equally between Canadian- and foreign-controlled firms; veneer mills show a predominance of Canadian ownership and the smaller companies shown under "Other" are all Canadian-controlled.

III - BEHAVIOUR OF FIRMS

HUSBANDRY OF FOREST RESOURCES

The commercially used forest lands of Ontario are shared almost evenly between large Canadian- and foreign-controlled firms. Under these circumstances, it is relatively easy to establish whether the two types of firms adopt different approaches to the husbandry of forest resources. Interviews with leading experts on forestry and with representatives of the companies indicate that no visible differences exist between foreign-owned and Canadian-owned companies in this regard. Most provincial and federal officials named two U.S.-owned firms as being slightly superior in forest management, but none of the interviewees found notable differences in practice.

The quality of husbandry is by itself difficult to quantify or even to define. Experts refer to a long-term outlook, with a willingness to trade off immediate profits against long-term use. As most of the re-forestation expenses are now born by the province this long-term policy is most likely to be reflected in the harvesting procedures, e.g. clear cutting, maintaining balance of species, etc. Company executives in U.S.-owned firms appeared to have a slightly longer-term view, but they could provide no specific information regarding present/long-term trade-off practices.

One measure of the care for renewable forest resources might be the ratio of professional foresters to square miles of forest and to

cunits of allowable cut. For the five selected companies, we found no significant difference in this respect which was traceable to ownership of the firm. The figures ranged from 26,000 cunits per forester to 58,000 cunits per forester; both the highest and the lowest figures pertained to Canadian-owned firms.

In interviews with the vice-presidents directly responsible for woodlands, almost all showed genuine concern for the long-term prospects of the forest. The only exception was an official of a Canadian-owned company, who compared the responsibilities of the Ontario Government for the forest with those of a landlord collecting rent (stumpage fees) from his tenant (the pulp and paper company) - that is, he saw the landlord as being responsible for the maintenance of the resource. In the light of the Ontario Government's heavy expenses on fire protection, tree nursery services and other protective measures, and considering the inherent value of the forest, this attitude is difficult to justify in rational terms. It reflects to some extent the highly private-enterprise-oriented attitude of some pulp and paper executives.

WATER AND AIR POLLUTION

The pulp and paper industry, and particularly the chemical pulp-making process, is a heavy polluter of water. The level of pollution in the effluents of pulp and paper plants (and in other polluted waters) is measured by three criteria:

1. Suspended solids
2. Biochemical oxygen demand (BOD)
3. Toxicity, taste and odour, and foam.

In the opinion of the Ontario Ministry of the Environment, significant progress is being made in ridding the province's waters of suspended solids. The Ministry puts heavy emphasis on BOD, as this influences the survival of marine life. The problem of pollution control is multifaceted and requires expensive installations; there is still much to be done before substantial improvements are made. Toxicity, taste, odour, and foam in water are particularly undesirable in or near urban areas, and public pressure has resulted in some progress.

We have tried to establish whether or not there is a significant difference in attitude toward this problem by Canadian-owned versus foreign-owned companies. The results of our investigations are rather inconclusive. Ontario Government sources have provided us with a detailed analysis of anti-pollution requirements for major pulp and paper mills. There does not seem to be any significant relationship between fulfilling anti-pollution obligations and ownership. All companies underwent a profit squeeze in the late 1960s, and this caused delays in purchasing and installing expensive anti-pollution equipment. Marginal mills with high production costs and requiring costly anti-pollution devices have received low priority in company investment decisions. This behaviour can be observed in both Canadian and foreign-owned firms. The experts we interviewed in government and industry named a U.S.-owned firm as possibly the most active and effective in the fight against pollution and a Canadian-owned company (not in Ontario) as the worst offender in Canada.

Attitudes to pollution expenditures are dictated in part by

the location of the mill; operations near population centres are evidently subject to stronger public pressure than is felt by those in the remote wilderness. Publisher-owned firms tend to be more conscious of their public image than other firms.

For the selected four pulp and paper firms, we carried out an analysis of anti-pollution investment as a percentage of sales for the past five years. An increase was observed in 1970 and 1971 and a decrease in 1972, resulting from the industry's profit squeeze. The actual figures ranged from 0.22 per cent to 2.0 per cent of sales.

A U.S.-owned firm consistently showed the highest ratio and a Canadian-owned firm the lowest. Investment in anti-pollution equipment, however, is not necessarily an indicator of performance. A firm may make relatively low expenditures in this area but still meet the standards set by the authorities if its mills are new and if they use non-polluting technologies at the outset. Conversely, high relative spending does not prove or even indicate compliance with regulations.

The general view of the industry, irrespective of ownership, is that for some obsolete mills, closing would be preferable to investment in expensive anti-pollution devices. This is an excellent economic argument; obsolete mills are not only bad polluters, but also expensive, inefficient producers, and they make the industry less than fully competitive on the world market. Other countries (such as Sweden) are making great strides in restructuring their industry into large, clean, efficient, production units. The tendency in Canada seems to be the

opposite. As a result of a humanitarian concern for local employment, inefficient plants are being maintained either by government subsidy or in some cases by takeover. Consequently, a general clean-up of the environment in Canada appears to be either extremely expensive or infeasible.

There was a consensus among the executives interviewed that the government (federal, provincial, and municipal) should do more to assist the industry in solving its pollution problem. Suggestions ranged from the government's taking full responsibility to a system whereby tax-free municipal bonds would be used to supply the necessary funds.

RESEARCH AND DEVELOPMENT

It has been suggested that U.S.-owned firms spend less in Canada on research and development than in the United States. To test this hypothesis, we have examined total R and D spending as a percentage of production of all Canadian-versus U.S.-based pulp and paper firms regardless of ownership. Exhibit 27 below indicates that R and D expenditures in Canada are only very slightly less than in the United States, and the most evident trend is a decline in both countries. This is probably due to the profit squeeze mentioned earlier. The extremely poor profitability of the industry in 1971 led to large-scale dismissals in the R and D functions, irrespective of ownership. Canadian-owned companies liquidated significant parts of their R and D effort at the same time and to approximately the same degree as their foreign-owned counterparts.

EXHIBIT 27

RESEARCH IN PULP AND PAPER BY ALL FIRMS,
CANADA AND THE UNITED STATES,
1969 - 1972

Year	<u>Located in the United States</u>			<u>Located in Canada</u>		
	<u>Production</u> \$ Billion	<u>Research</u> \$ Million	<u>Per</u> Cent	<u>Production</u> \$ Billion	<u>Research</u> \$ Million	<u>Per</u> Cent
1969	20.5	113	0.55	2.77	14.7	0.53
1970	NA	NA	NA	2.86	15.4	0.54
1971	23.3	133	0.57	2.85	13.2	0.46
1972	28.0	133	0.47	3.00	13.2	0.44

Source: Statistics Canada Catalogue 13203
Monthly Statistical Summary, American Paper Institute

The interviewed companies showed a wide spread of ratios for R and D versus sales. The two Canadian firms were close to the industry average, the U.S.-owned tissue manufacturer was significantly below this figure, while the other American-owned company was much higher than average.

Now that the profitability of the pulp and paper industry has significantly increased, it will be interesting to observe whether research and development expenditures will move back to their pre-recession levels and whether or not foreign-owned firms will follow different behaviour patterns from those of Canadian-owned companies.

Research and development efforts directed toward the modernization and mechanization of the logging industry unfortunately have been largely unsuccessful. Neither a privately financed venture nor the Canadian

Pulp and Paper Research Institute (PAPRICAN) has been able to provide substantially improved production machinery, and the entire project is now in jeopardy. This is a most serious problem, because the manpower shortage in the woodlands is becoming critical and mechanization would have been the most promising solution. U.S. machinery is not well suited for Canadian terrain and weather, but a rugged and productive Canadian machine would have a good market. A new initiative to solve this problem is now taking shape.

In the area of research and development for the pulp production and paper-making processes, both private manufacturers of machinery and PAPRICAN are claiming significant commercial successes. In general, the existence of PAPRICAN, which is maintained to a large extent by the industry itself, is a significant asset to Canada. Contributions to its financing are provided by pulp and paper companies on a levy-per-production basis, irrespective of ownership. In 1972, \$2.58 million or 72.5 per cent of its budget was provided by assessment. Only one company (Canadian-owned) has refused to contribute to the Institute; this company does not have a research program of its own.

PAPRICAN is doing about 20 per cent of all the industry's research in Canada. The main objectives of the program are to improve the utilization of fibre (to obtain higher yield), to reduce pollution in the pulp-making process, and to decrease the capital cost per ton of paper-making.

PAPRICAN's technical reports are made available to the members,

who then benefit in improving their operations. Large multi-national corporations with pulp and paper operations in Canada thus have access to the results of Canadian research and can use these results in their world-wide operations, although their contribution is based only on their production in Canada. Consulting services by PAPRICAN are made available to member companies at a reduced rate, while non-members (companies with no operations in Canada) pay full rates. Although multi-national corporations enjoy the lower price only for their Canadian operation, the results of consulting assistance are, of course, available to their subsidiary operations in other countries as well. Member firms pay no royalties for using PAPRICAN patents, but foreign operations of multi-national corporations pay regular royalty fees. The board of PAPRICAN has seventeen members; two are designated by the Federal Government, three by McGill University, and thirteen by the Canadian Pulp and Paper Association (CPPA). The CPPA nominated five executives of Canadian-owned companies, six executives of foreign-owned companies, and its own president and the president of PAPRICAN. Thus, it appears that only one-third of the board's members represent foreign ownership, although the CPPA nominated a majority of foreign-owned company executives.

LARGE-SCALE REDUCTION IN LABOUR FORCE

No noticeable difference resulting from ownership could be established in corporate attitudes toward large-scale dismissals. When markets contracted and the profit squeeze was on, the companies decided that some uneconomical operations had to be closed down. Some of our

informants reported that there were U.S.-owned companies which acted more harshly than their Canadian-owned counterparts, but the final result was not significantly different.

WAGES AND BENEFITS

Wages and fringe benefits in the Canadian pulp and paper industry, as shown in Exhibit 15, are higher than in the United States even after adjustment for regional differences. Productivity in the United States grew faster than in Canada, as shown in Exhibit 14. Some representatives of Canadian-owned firms suggested that to some extent this tendency may be due to foreign ownership of mills and foreign domination of unions. They thought that large U.S.-owned firms may be more generous in providing wage settlements in Canada than they are in the United States. When the overall wage levels in this country are raised (for both Canadian-owned and foreign-owned firms), all Canadian-based firms lose competitive advantages in the United States market. Thus, the relative competitive position of a large American-based producer is slightly improved. U.S.-controlled unions, with a majority of their membership in the United States, may not consider the attrition of jobs in Canada to be a major loss, as long as a similar number of jobs is created or protected in the United States.

These views were not shared by all interviewed executives. Officials of the federal Department of Labour and the Ontario Ministry of Labour also had different explanations. They pointed out that the specific local in the union makes the ultimate decision as to acceptance

or rejection of a wage settlement. The history of wage negotiations is such that it is very difficult to determine whether or not it is American- or Canadian-owned firms that have set the basis for settlements. In the past seven years, the disclosed settlements were made in approximately a 50/50 split between American- and Canadian-owned firms. Our sources also pointed out, however, that prior to 1960 the American firms led in settlements; that is, the international unions hit the American firms first and, having established a bench mark, then negotiated with the Canadian-owned firms for the same wage settlement. The higher wage settlements in Canada in recent years have been mainly due to the predominance of Canadian pulp and paper in the world market. Because of this, the unions have first established wage settlements in Canada and have then taken these back to the United States to obtain similar agreements there. In other words, the process has been reversed.

We are unable to establish which of these opinions describes properly the cause of the discrepancies between U.S. and Canadian wage development. The fact that there is a consistent escalation of Canadian rates relative to U.S. rates warrants our concern, as continuation of this trend would certainly endanger the competitive position of the Ontario pulp and paper industry.

One of the most significant labour problems in Ontario is the increasing reluctance of young people to work in the forest. This tendency is also widespread in other provinces, including British Columbia, and it has its roots in changing social values. The harsh environment

of a logging camp does not attract young, well-educated people, even if the financial compensation is relatively high. The Canadian Pulp and Paper Association is carrying out a study into the problems of woodland labour, and its recommendations can be expected to be along the lines of increased mechanization, a reduction of jobs requiring residence in camp, and improved transportation to woodland areas, including the provision of daily commuting facilities.

IV - SOME GENERAL ASPECTS OF FOREIGN OWNERSHIP

On the basis of our investigation, we are able to analyze some general aspects of foreign ownership as they relate to the forest industries and particularly the pulp and paper industry in Ontario.

BRANCH PLANTS - MINIATURE REPLICAS

In manufacturing industries, one of the disadvantages of foreign ownership in Canada may be the relatively short production run imposed by the market, combined with the fact that large U.S.-controlled corporations tend to build in Canada miniature replicas of their central operations. These plants are designed to produce a large variety of items; but because the market in Canada is much smaller, their operations carry a higher unit cost. Under these circumstances, profitable manufacturing is possible only under tariff protection.

In many of the forest-based industries, the situation is different. For example, more than 91 per cent of Canada's newsprint shipments in 1971 were for export; for paper and paperboard, exports were over 51 per cent. This indicates that at the present time Canada's industry is competitive. Typically, Canadian pulp mills and paper machines are not smaller than those in the United States.

In the production of tissue paper, the miniature replica problem is quite significant. Canadian operations are smaller and less efficient than those in the United States.

The Canadian fine paper industry also is faced with problems of size. As a result of historical tradition and tariff protection, this industry supplies mainly Canadian markets, uses smaller machines, and has shorter production runs than similar operations in the United States. This problem cannot be ascribed to foreign ownership, however, because no foreign-owned company is significantly involved in fine paper production in Canada.

The export of fine papers from Canada exceeds imports, excluding printed matter. When printed matter is included, the balance is reversed. Canada is the largest importer of printed matter in the world, both in absolute terms and on a per capita basis. The reason for large-scale importation of books printed in the United States has been studied in the context of the problems of the Canadian publishing industry and is beyond the scope of this report. The much longer production runs of books, brochures, and other printed matter are usually quoted as giving the printing and publishing industries in the United States a very significant advantage over their Canadian competitors.

The trade imbalance in printed matter can be traced to U.S. domination of a continental market, but not to foreign ownership in the pulp and paper industry. Officials in the federal Ministry of Industry, Trade and Commerce have indicated that the relative differences in value added between various products in the industry are not as large as they are often assumed to be. The list below gives the approximate multiplier

over the value of the wood delivered at mill gates for different levels of processing.

Wood	1.0
Mechanical pulp	3.0
Kraft pulp	4.0
Kraft paper	5.0
Newsprint	7.0
Fine paper	9.0

The figures indicate that there is no dramatic difference in value added between the various grades of paper.

TRUNCATED INDUSTRIES

It has been suggested that foreign-owned companies do not allow maximum growth of executives' talents and R and D capability in their branch plants. The most challenging functions, the most rewarding jobs, and the ability to integrate forward and backward are concentrated in the head office, and the operation of the Canadian subsidiary is therefore truncated.

In newsprint and market pulp operations, this phenomenon does not occur in its usual form. Foreign-owned paper companies in Canada are in most instances no smaller than operations in the country of ownership. For this reason, technical management decisions are commonly made in Canada, and R and D functions also are reasonably well developed. Overall marketing and long-term planning functions, however, are somewhat truncated.

Publisher-owned newsprint mills enjoy complete technological independence and have good R and D opportunities. The owners have no expertise in paper making and leave most decisions to Canadian executives. As they have a captive market, the marketing function of publisher-owned firms is truncated. This is due to their special position, rather than to ownership.

In tissue manufacturing, truncation is more of a problem. Tissue mills in Canada are centred around the marketing of the end product (mostly sanitary tissue) to the consumer. The operation is regarded by American top management as simply another branch plant with a tariff-segregated market assignment.

We analyzed decision-making processes in the five selected firms and found that all Canadian-owned and foreign publisher-owned firms had their own market research and long-range planning departments, while a foreign-owned tissue manufacturer did not. This latter firm reported, not to the U.S. board of directors, but to an international department in head office. The Canadian board of directors was described by the president as a "paper board".

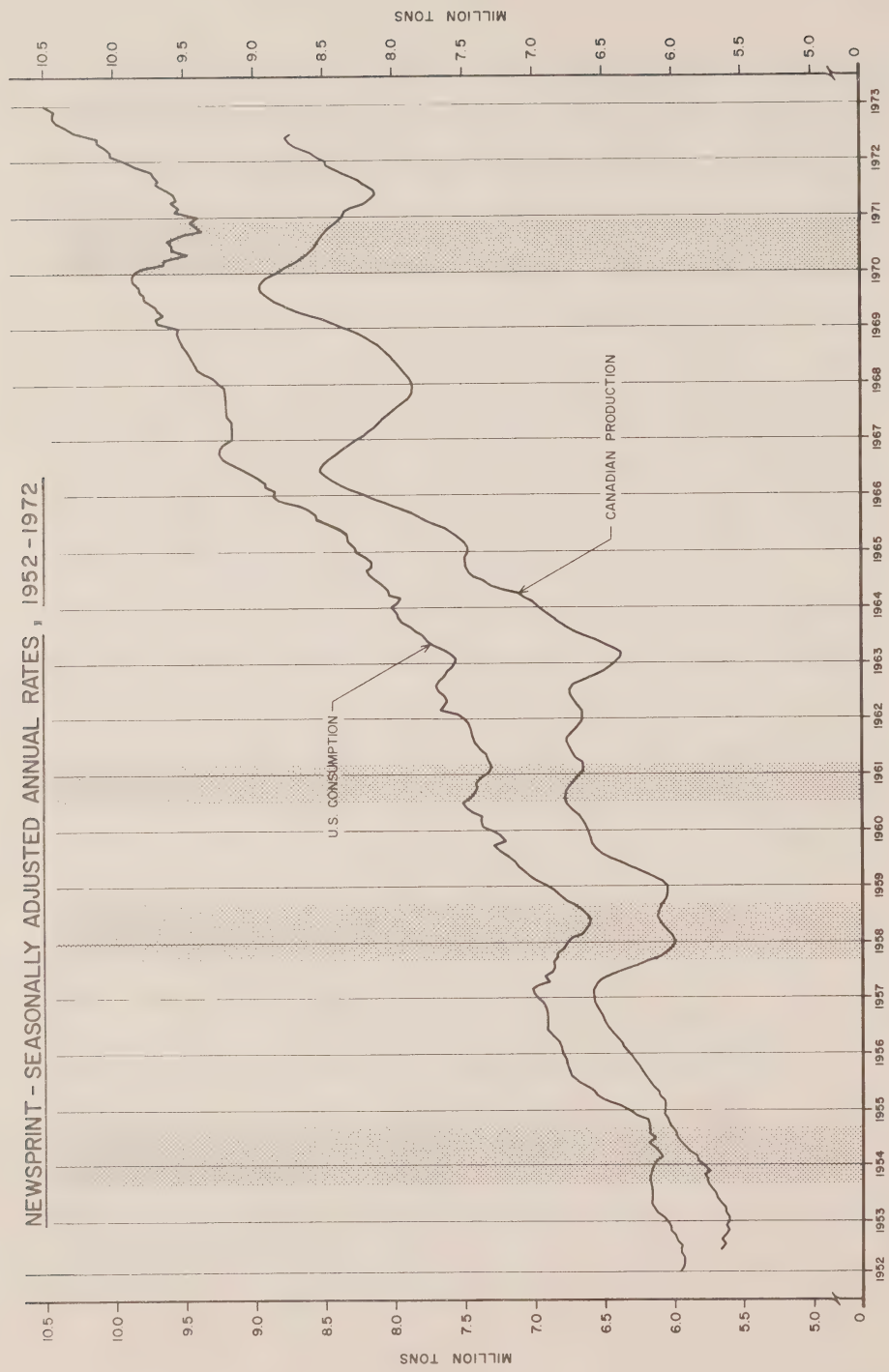
With regard to career opportunities for Canadians, U.S.-owned firms have numerous executives at the vice-presidential level who were originally U.S. citizens and are either landed immigrants or have become Canadian citizens. All the presidents of the interviewed firms were Canadian citizens, though not necessarily Canadian-born. Career opportunities for Canadians may be somewhat curtailed by this practice,

but the size of our sample does not allow us to draw final conclusions on the question. In publisher-owned firms Canadian executives have no advancement potential in the present company as publishing is an entirely different business from paper making. We know of at least one example, however, in which a Canadian junior executive was groomed in the United States head office to become president of the Canadian subsidiary. Some executives of Canadian-owned firms expressed the view that Canadian management talent may find best development potential in the United States, irrespective of the ownership of the firm on either side of the border as the North American continent is one unit for the industry. During the recent recession the Canadian management of a large integrated foreign-owned company was replaced by American senior personnel. This isolated incident indicates a potential impact of foreign ownership: when business conditions take a prolonged negative turn, foreign owners may have a tendency to replace local talent with people who are felt by head office to be more experienced and better able to weather the storm.

We may thus conclude that management by foreigners is not a significant problem at the present time but may potentially have a negative effect on the careers of Canadian top management teams under the condition of a protracted recession. We were informed that when Canadian companies operate in the United States they do not truncate operations there. To show good corporate citizenship and understanding of local sensitivities, they hire exclusively local American personnel and give them broad decision-making power.

EXHIBIT 28.

NEWSPRINT - SEASONALLY ADJUSTED ANNUAL RATES, 1952-1972



RECESSIONS IN U.S.

SOURCE: Canadian Pulp and Paper Association, Annual Newsprint Supplements

Kates, Peat, Marwick & Co.

EXPORT RESTRICTIONS

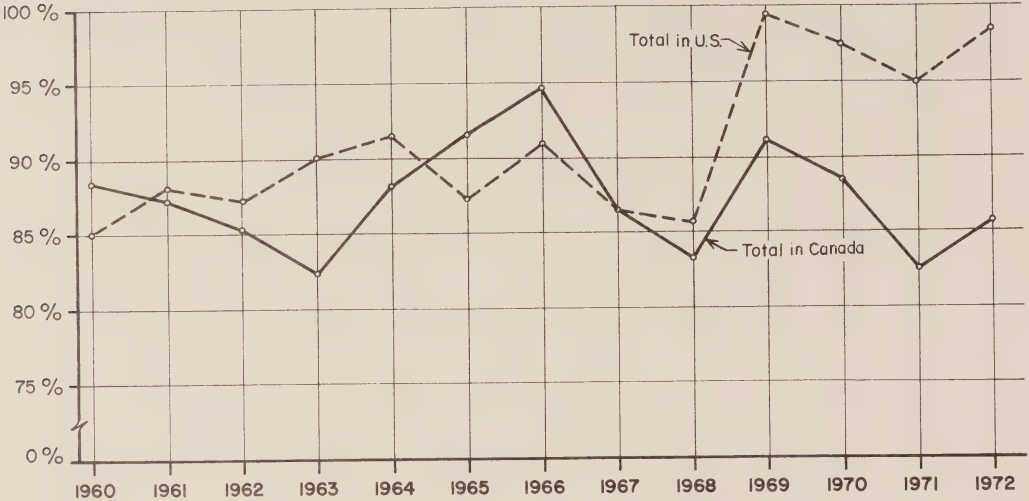
Some observers suggest that foreign ownership of manufacturing industries leads to restrictions on exports from Canadian subsidiaries. The high percentage of production going to exports from Ontario's forest based industries implies that foreign ownership did not restrict the export sales in this industry. The very large proportion of sales going to the United States is explained by proximity and transportation costs rather than by ownership. In the European markets and to a lesser degree in South America, Ontario has some disadvantage compared to Scandinavia, the Atlantic Provinces and Quebec. The Japanese market is much closer to the West Coast. For these reasons the Ontario producers have historically concentrated on the U.S. midwest as a natural outlet for their exports, as illustrated by Exhibit 12(a). There is no difference between Canadian and foreign-owned companies in this respect; both groups consider the North American market as one unit and try to expand their share of it. Some publisher-owned newsprint mills work exclusively for export. It can therefore be stated that foreign ownership has not led to export restrictions in the Canadian pulp and paper industry.

Another aspect of sales policy, which can be connected with foreign ownership is the fluctuation of exports during the upswings and declines of the general economy. A comparison of Canadian production and U.S. consumption of newsprint shows the behaviour of this industry. Exhibit 28, opposite, indicates that the swings in Canadian production tend to be more severe than those of U.S. consumption. The declines in 1957, 1963, 1966, and 1970 show this very clearly. The explanation is probably

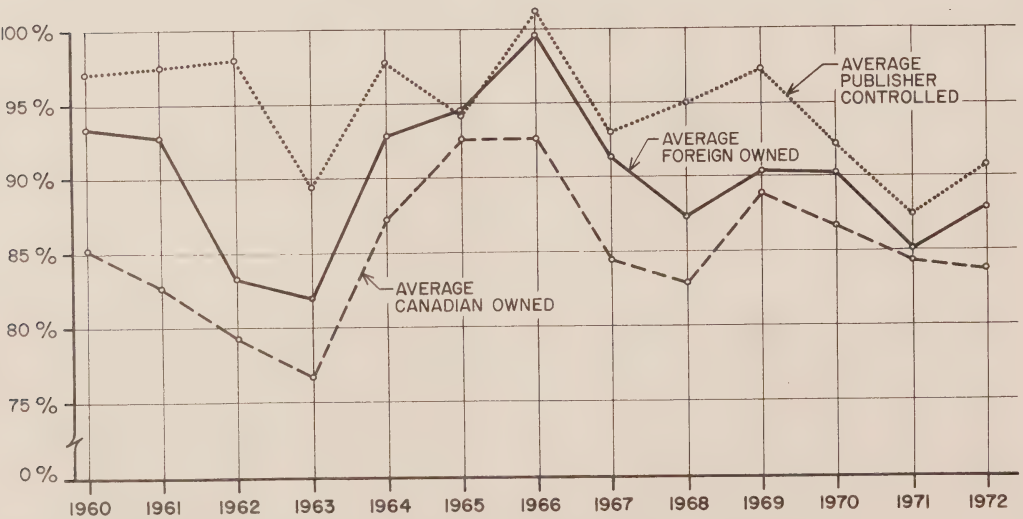
EXHIBIT 29

ANNUAL COMPANY NEWSPRINT PRODUCTION AS A PERCENTAGE
OF ANNUAL COMPANY NEWSPRINT CAPACITY, SELECTED FIRMS ,
1960 - 1972

CANADIAN INDUSTRY VERSUS U.S. INDUSTRY



CANADIAN INDUSTRY BY OWNERSHIP



the so-called surge tank effect: it is supposed that Canada is used as a large-scale source of supply when demand rises faster than domestic supply in the United States; when this is not the case, imports from Canada decline more rapidly than domestic production. During the upswing of January - September 1959, U.S. consumption of newsprint rose by 5 per cent, while Canadian shipments to the United States climbed by 10 per cent. The same figures for March 1963 - June 1966 were 20 per cent and 36 per cent. The tendency during declines is even more pronounced. U. S. consumption fell by 4 per cent from January 1957 to January 1958, while Canada lost 8 per cent in exports; the performance from July 1962 to February 1963 was -1 per cent versus -8 per cent.

The analysis by ownership in Canada shows a most interesting relationship to capacity utilization. Newsprint production as a percentage of the annual company newsprint capacity (operating rate) declined much less for U.S. publisher-controlled companies than for Canadian-owned ones. Foreign-owned but not publisher-controlled firms were in between. The trend is shown in Exhibit 29, opposite.

It is evident that publisher-controlled firms held up better during the general decline of the late 1960's and recovered faster than other firms. The executive vice-president of a publisher-controlled firm told us that this marketing advantage is well known and natural, as publishers purchase less newsprint on the open market and minimize the decline of their own production when their consumption declines. Some

executives of Canadian-owned firms attributed the poorer performances of their own sectors to less aggressive marketing management.

An important aspect of the pulp and paper industry's export performance is its reliance on the U.S. market. To illustrate the problem, we have analyzed the export of newsprint, the most important export commodity of the industry. In 1971, the distribution of Canada's shipments was as follows:

EXHIBIT 30

DISTRIBUTION OF CANADIAN NEWSPRINT SHIPMENTS,
1971

<u>TO</u>	<u>.000 tons</u>	<u>% of Total Canadian Exports</u>	<u>% of Total Canadian Shipments</u>
United States	6,114	81.6	74.5
United Kingdom	379	5.1	4.6
Central and South America	512	6.8	6.2
Western Europe	67	0.9	0.8
India and the Orient*	278	3.7	3.4
Other	140	1.9	1.7
Total Exports	7,490	100.0	91.2
Canada	720		8.8
Total Shipments	8,210		100.0

* including Japan

Source: Canadian Pulp and Paper Association, Reference Tables 1971.

A historical comparison shows that Canada's reliance on a single customer has become somewhat less severe over the past twenty years. Exhibit 31 below shows the tendency in the main markets.

EXHIBIT 31DESTINATION OF CANADIAN NEWSPRINT EXPORT SHIPMENTS,1952 - 1962

(Per cent)

	<u>1952</u>	<u>1962</u>	<u>1971</u>
United States	91.3	84.5	81.6
United Kingdom	2.5	8.1	5.1
Central and South America	3.1	3.8	6.8
Western Europe	0.2	0.2	0.9
India and the Orient *	0.7	0.8	3.7
Other	2.2	2.5	1.9

* including Japan

Source: Canadian Pulp and Paper Association, Reference Tables 1971.

Although the volume of trade with non-U.S. markets has experienced spectacular growth, these areas still provide the industry with less than 20 per cent of its exports.

A comparison with Sweden seems to indicate at first sight that its newsprint market was considerably more diversified than Canada's.

EXHIBIT 32SWEDISH DELIVERIES OF NEWSPRINT, 1971

	<u>.000 Metric Tons</u>	<u>Export %</u>	<u>Deliveries %</u>
United Kingdom	105	15.6	11.2
E.E.C.	338	50.4	35.9
Other Western Europe	84	12.5	8.9
Rest of the world	<u>144</u>	<u>21.5</u>	<u>15.3</u>
Total exports	671	100.0	71.3
Sweden	<u>270</u>		<u>28.7</u>
Total deliveries	941		100.0

Source: Pulp and Paper Industry, 1972, Swedish Pulp and Paper Association.

Sweden produces and exports significantly less newsprint than Canada. It has a strong domestic market, which takes a larger percentage of shipments. On the surface, it appears that no customer group purchases more than 36 per cent of Sweden's total deliveries. But if Western Europe is considered as a unified market (which much of it is), over 78 per cent of Swedish newsprint exports is directed to this area. From this viewpoint, Sweden's market position corresponds closely to Canada's reliance on the United States which takes slightly over 80% of Canada's exports. Sweden directed 1.2% of its exports to the United States, providing approximately 0.13% of the total supply in the United States.

The comparison between Canada and Sweden suggests that major producing countries are specializing in serving their "natural markets" because of transportation and other related advantages. This tendency is apparently not influenced by ownership, since the industry in Canada exhibits a high level of foreign ownership and in Sweden's is entirely domestic owned.

The fastest growing market, Japan, is much more accessible to Canada in terms of transportation costs than to Scandinavia, and the pulp and paper industry in British Columbia has an excellent opportunity for competing in this market, barring efficient large scale Soviet competition. It cannot yet be determined to what extent an increasing demand will lead to further Japanese ownership in the pulp and paper industry or whether Canada can go sufficiently far in

exporting final product (newsprint, kraft paper, fine paper), rather than semi-processed pulp.

The influence of foreign and particularly U.S. ownership on exports may increase if a scarcity of product develops in the United States. The rather promising expansion of other export markets may be halted and even reversed in order to serve American customers.

The diversification of Canadian markets probably will mean more trade with Europe and South America for Quebec and the Atlantic Provinces, an increased trade with Japan for British Columbia, and the maintenance of Ontario's traditional links with the U.S. Midwest.

PURCHASE OF PRODUCTION MACHINERY

Representatives of the pulp and paper companies who were interviewed reported that they purchase over 80 per cent of their machinery in Canada. It was not feasible to corroborate this information by a detailed company-by-company analysis. No difference was traceable to ownership. A senior executive of a Canadian-owned, integrated pulp and paper company and the president of a major manufacturer of equipment claimed that U.S.-owned firms are more inclined to buy Canadian-made machines than are Canadian-owned companies.

Officials of the Department of Industry, Trade and Commerce confirmed that the 80 per cent ratio is in line with their experience regarding established companies. They expressed the view that

ownership has no visible influence on the propensity to buy Canadian-made machinery.

We have calculated for both Canada and the United States the ratio of domestic manufacture of production machinery to the value of paper and allied products. This approach is helpful in establishing order of magnitude comparisons but it does not provide a completely valid analysis of Canadian self-sufficiency or the impact of foreign ownership on machinery purchasing behaviour. Firstly, machinery sales should not be related to shipment of paper but to capacity expansion. Capacity was growing faster in the United States, than in Canada due to the development of the forest resource base in the South East. Secondly, the impact of concessional financing in Canada impeded equipment sales to some of the most significant new pulp and paper projects. The behaviour of established companies owned by Canadians or foreigners is not separated statistically from concessionally financed newcomers.

The comparison of machinery sales to paper shipments shows that between 1965 and 1970 the value of machinery shipped ranged from 2.4% to 3.3% of that of paper and allied products in the United States. The same ratio in Canada was moving between 1.6% and 2.3%. In the light of the comments made above on different industrial growth and on concessional financing, there does not seem to be evidence proving the hypothesis that U.S.-owned firms are more prone to buy American machinery. The statement made by both Canadian- and American-owned companies regarding 80% Canadian content on machinery is not proven but not contradicted by the analysis.

Statistics Canada data and statistics compiled by the Department of Industry, Trade and Commerce are not reconcilable. Pulp and paper making machinery is defined in a variety of ways, and the machines themselves are produced by a wide range of industries. For this reason, we have collected as much related data as possible from such sources as the Market Data Division, Department of Industry, Trade and Commerce. We have also carried out interviews with government departments and manufacturers. In sum, we have found that pulp and paper making machinery made in Canada is highly competitive with such products from any other country. Canadian-made machines have been selected in Mexico over Finnish machines, and there is a significant export of pulp and paper making machinery to the United States. At present, there is an anti-dumping action pending against Dominion Engineering (a fully owned subsidiary of Canadian General Electric) regarding exportation of paper making machinery to the United States.

There is significant importation of pulp and paper machinery into Canada. The federal Ministry of Industry, Trade and Commerce and an independent Canadian manufacturer of pulp and paper making machinery have stated, however, that foreign-owned firms do not have a higher propensity to buy foreign machines than do Canadian-owned companies. According to the interviewed manufacturing executives, there may be a reverse tendency; that is, Canadian-owned companies may be more inclined to buy foreign, while U.S.-owned companies purchase Canadian machinery in order to demonstrate good corporate citizenship. The main problem is in the area of concessional financing. Foreign financial institutions

provide favourable terms for loans for establishing pulp and paper companies in Canada on the condition that machinery is purchased in their country. Labrador Linerboard was an example of this kind of financing: in this case, Canadian equipment manufacturers were completely eliminated from the competition in favour of manufacturers in the United Kingdom.

PROFITABILITY

A general comparison of the paper and allied industries in the United States and Canada, irrespective of ownership, does not indicate on the average significantly different profit levels in recent years (see Exhibit 33).

EXHIBIT 33

REVENUE AND PROFIT FOR PAPER AND ALLIED INDUSTRIES, CANADA AND THE UNITED STATES,

1962 - 1971

	<u>Net Profit Margin</u>	
	<u>Canada</u>	<u>U.S.</u>
	<u>%</u>	<u>%</u>
1962	7.8	4.6
1963	7.9	4.5
1964	8.9	5.1
1965	7.6	5.0
1966	7.7	5.4
1967	4.1	4.7
1968	3.8	4.7
1969	4.8	4.8
1970	2.9	3.4
1971	2.0	NA

Source: Statistics Canada Catalogue 61207, Department of National Revenue Part II Taxation Statistics F.T.C.-S.E.C. Quarterly Financial Report for Manufacturing Corporations.

Profits in the United States were much lower in the early 1960's, but they declined less toward the end of the decade.

We have analyzed the profit behaviour of individual Canadian- and foreign-owned firms. (See Exhibits 24 and 25). The margin on sales and return on assets was very much higher for Canadian-owned firms in the early 1960's, but toward the end of the decade and in the early 1970's, the position was reversed and U.S.-owned companies operating in Canada fared significantly better than Canadian-owned firms. This comparison may indicate an advantage of foreign ownership when the main market for the product is in the country of ownership. Some informants have also claimed that better management skills exist in foreign-owned companies, but we are unable to establish which of these possible factors contributes more to the observed differences in profit levels.

ENGINEERING CONSULTANTS

An aspect of behaviour investigated was whether foreign- or Canadian-controlled engineering consultants are hired more by foreign- or Canadian-controlled pulp and paper companies. It was found that the engineering work for pulp and paper companies is largely undertaken by Canadian- controlled engineering consulting firms and that they are hired by both foreign- and Canadian-controlled pulp and paper companies. Three Canadian-controlled engineering consulting firms who specialize in the pulp and paper industry appear to dominate the work in that industry.

From comments on the part of a senior executive in one of these firms, it appears that the relationship between the engineering consultants

and the manufacturers is fairly close knit, and it is supposedly difficult for another engineering consultant to break into the industry. In fact, one large U.S. engineering firm tried, without success, to penetrate the pulp and paper engineering consulting field in Canada through the acquisition of a smaller Canadian-controlled firm.

Plant construction involves proven and well established engineering processes and foreign- or Canadian-controlled pulp and paper companies have developed the required technical knowledge in Canada. Due in part to this situation, Canadian-controlled engineering firms have grown with the pulp and paper business in Canada, and lead other engineering firms in exporting their services.

In addition, pulp and paper engineering projects, though large, are not "turnkey" jobs, which require a construction management capability and greater financial responsibility. If they were to develop in this way, foreign-controlled firms, which tend to dominate construction management projects in some mining and resource development fields, could be more competitive with Canadian-controlled engineering consulting firms.

POTENTIAL INDUSTRY BEHAVIOUR AND GOVERNMENT RESPONSES

In the preceding pages, we have analyzed the observed behavioural differences between Canadian-owned and foreign-owned companies. It is also useful to review potential future behaviour, and we have set up two hypothetical situations or scenarios for this purpose.

The first case assumes that the demand for wood fibre in the form of newsprint, packaging material, and tissue outstrips supply in North America. Under these circumstances, end users of the product will do their best to secure a continued flow of raw material. The cost of fibre in their end product (such as newspaper and cereal boxes) is relatively low, and they can afford to offer attractive purchase prices for Canadian-owned companies. These companies will then become captive, secure resources of raw material for the continental operation of a U.S.-owned firm. This scenario would therefore tend to result in the following situation:

- increased foreign ownership and control of the industry in Canada
- more stability in exporting the products as a result of captive markets
- inflow of capital potentially contributing to upward pressures on the Canadian dollar.

If necessary, a review board could stop an increase in foreign take-overs. At the same time, long-term, firm, and mutual commitments for U.S. purchases and Canadian supplies could be encouraged. This would serve the interests of both the end users and the Canadian manufacturers without incurring a change in ownership.

If no preventive action were taken, the following flow of events would tend to occur.

A number of efficient, Canadian-owned pulp and paper producers would be taken over by foreign companies wishing to secure

access to a dwindling raw material base. At the same time, a new and basically inefficient industry would develop, using government subsidies in provinces and regions that wish to provide employment. Direct or indirect subsidies would make ongoing operations of these firms quasi-profitable. If past experience is our guide, these Canadian-government-subsidized firms would be predominantly foreign-owned.

A significant number of obsolete and otherwise uneconomical plants and some of the less stable new firms would threaten to close down operations because of market pressures and/or poor management. Provincial governments would take them over and therefore become owners of an inherently inefficient, subsidy-gobbling sector of the pulp and paper industry, while the foreign-owned sector would be efficient and/or profitable.

The second scenario assumes a relative weakening of the competitive position of the eastern Canadian pulp and paper industry. This condition could be caused by one or more of the events listed below:

- contraction or slow growth of demand in the United States
- rapid expansion of competing production facilities, particularly in the southeastern United States or the supply of a large volume of cheap fibre from new sources, e.g. tropical hardwood and/or sugar cane bagasse
- further deterioration of the price-competitive position of the industry, caused by escalating costs and/or an increase in the exchange rate
- a heavily protectionist attitude in the United States.

Under these circumstances, there would be pressure to close down the least efficient producers, irrespective of ownership. Anti-pollution controls either would have to be relaxed or would lead to the closing of some important regional employers. U.S.-owned companies - with the exception of publisher-controlled firms - might be expected to be less considerate than Canadian-owned firms in liquidating their operations. U.S. publisher-owned multi-nationals would tend to supply their markets from their U.S. operations, while contracting their activities in Canada. Independent Canadian-owned firms would be subject to a radical contraction in their business and profits. They might be subject to takeovers at bargain basement prices by foreigners expecting improved business in the long run.

Government action during an industry-wide recession would likely be directed toward saving jobs and production rather than ownership. If the main cause of the decline were a deterioration of the competitive position, the two senior levels of government could

- offer inducements to increase productivity in the form of loans, grants, and/or tax benefits for installation of modern, productive equipment
- neutralize the transportation cost differential to the main markets by rate policies or other methods, such as provision of special railway cars at no cost
- provide general tax stumpage fee, or pollution control relief.

Actions involving fixed incentives leading to real productivity improvement (for example, investment assistance) should have preference

over palliative, open-ended commitments (such as subsidies). Such actions could either cover all firms in need, irrespective of ownership, or give preference to Canadian-controlled companies.

If U.S. government action were the main cause of the problem, the Federal Government could consider the problems of the pulp and paper industry in the general framework of U.S. - Canadian relationships and use other levers (such as energy policy and ownership legislation) to help rectify the situation.

The provincial takeover of those firms which would otherwise go out of business should be considered only as a solution of last resort for saving jobs and communities. It is an expensive procedure and does not contribute to higher productivity nor improve the market position of the industry.

V - ATTITUDESCONTINENTALISM

In our interviews, we questioned company executives regarding their attitudes toward the problems of the forest industries beyond the interests of their own firms, and also about general problems of Canadian economic and cultural nationalism. While it is not possible to draw many general conclusions from the limited sample of five companies, it has been observed that executives of Canadian-controlled firms in Ontario and Quebec seem to have less confidence in the ability of their own industry (particularly in the fine paper area), the Canadian manufacturing industry in general, and finally Canada as a nation to be fully competitive in the world. The comments received indicated that this feeling of Canadian inferiority results in some considerable measure from our close ties to, and constant comparisons with, the much larger, and in some areas more advanced United States. Canadian executives interviewed appeared to have an even greater North American continental outlook than their counterparts directing foreign-owned firms, or perhaps they were more frank in expressing continentalist views.

GOVERNMENT INTERVENTION
- CONFLICTING OBJECTIVES

With one single exception, all executives expressed their strong preference for the forces of the marketplace over government intervention; one executive (working for a U.S.-owned firm) indicated the need for significantly more centralized national planning for all levels of the

industry. Most interviewees expressed their concern over conflicting objectives in government policies. They alleged that while the Federal Government makes efforts to restrict foreign ownership, large-scale investment by foreign companies is invited mainly by provincial but to some extent federal authorities to enhance the industrialization of under-developed regions. Tax, infrastructure, and other concessions are offered to foreign-owned firms, who then use these unfair competitive advantages against existing Canadian-based companies. The example of the new pulp mill to be established by Rayonnier (an International Telephone and Telegraph subsidiary) on the north shore of the St. Lawrence was mentioned, together with the unsuccessful efforts of foreign-owned companies in the Labrador Linerboard and Churchill Forest Industries cases. This trend is evident in other industries also, particularly oil refining, where the Shaheen enterprise is the best example. It was pointed out that many of these enterprises receive concessional financing from abroad. These new firms are located at sites which otherwise would not have been selected; otherwise they would not have received government assistance. They introduce long term inefficiency into the forest based industry of Canada.

A clash of objectives also was evident to many interviewees regarding the fight against pollution. Many executives question the need for cleaning up waters in sparsely inhabited areas when this will endanger the profitability of Canadian-based firms and jeopardize jobs for Canadians.

PROBLEMS OF THE PULP
AND PAPER INDUSTRY

Executives of Canadian- and foreign-owned companies unanimously suggested the need for rationalization of the timber limits in Ontario. At present, timber limits are based mainly on historical patterns, and there is a significant amount of cross-hauling of roundwood. By reassigning the woodland areas in a way that is fair to the operators and simultaneously minimizes transportation costs, the competitive position of the entire industry can be enhanced. It was stated that small sawmill operators should be discouraged and that an effort should be made to integrate sawmilling with the pulp and paper industry. No specific suggestions were made as to how this objective could be achieved.

Regarding export and trade barriers, there was a consensus that the newsprint and pulp-making sectors of the industry do not face trade barriers; their problem is the fast increase in their costs and the fact that they are further from some important potential markets than their competitors.

In fine paper manufacturing, opinions were available only from executives of the two Canadian-owned firms, owing to the lack of involvement of foreign-owned firms in this area. One of the interviewees suggested consolidation and government encouragement of rationalization, with the objective of decreasing imports. This executive saw very little chance of increasing Canadian exports to the United States. The other company executive was of the opinion that no government interference is required.

Free trade in fine papers with the United States would lead to the extinction of Canadian manufacturing, according to both company executives. Canadian costs are too high in their view, and distribution in the United States is owned and controlled by American manufacturers. By the time Canadian-owned firms could develop their market in the United States, the market in Canada would have been taken over by more efficient U.S. firms. The view was expressed that Canadian-owned companies would have a better chance of penetrating the U.S. fine paper market if they established manufacturing facilities south of the border.

As distinct from free trade, a solution similar to the automotive trade agreement would have been welcomed by some executives of fine paper companies. This would mean that Canadian production levels would be protected and that only manufacturers would be allowed to import duty free.

The tissue manufacturing sector is entirely U.S. dominated (by Kimberley Clark/Kleenex and Scott). The opinion given by an executive of a large producer of tissues was completely pessimistic. He expressed the view that free trade in consumer products (tissues) would mean that manufacturers in Canada would lose sales to significantly larger U.S. producing units. He suggested that there are too many firms in this business in Canada and that they are not competitive. Even higher tariffs would be required to protect the industry. Rationalization within the industry might somewhat improve Canada's competitive position.

VI - COMPARISON WITH SWEDEN

The Swedish pulp and paper industry is Canada's main competitor in the European Common Market. As the pulp and paper industry in Sweden is entirely domestic owned, it may be useful to compare its performance with that of Canada. Exhibit 34 below shows some comparisons between the two countries. While Canada produces at a higher rate (particularly in newsprint), the importance of the industry to the economy of both countries is comparable. (Pulp and paper makes a slightly larger contribution to the Swedish economy than to Canada's.)

EXHIBIT 34

COMPARISON OF CANADIAN AND SWEDISH INDICATORS, 1970

	<u>Sweden</u>	<u>Canada</u>
\$ Value Added, Pulp and Paper	\$1,483	\$2,559
Percentage of GNP	3.7%*	3.0%
Percentage of Exports	14.6%**	12.5%
Newsprint (tons)	1,022	8,764

Notes: * 1965-1969

** 1971

Source: Canadian Pulp and Paper Association Reference
Tables 1972

Swedish Pulp and Paper Association Reference
Tables 1972

According to Swedish government publications*between 1963 and 1970, value added in the industry grew in Sweden by 122 per cent, while

* Fact Sheets on Sweden FS 33 e p and FS 25 g Qf, 1972

the growth in Canada over the same time span was only 44 per cent. Equity (invested capital) in Sweden increased by 76 per cent, while in Canada the growth was only 32 per cent. The number of firms in Sweden declined from 318 to 275, while in Canada there was an increase from 126 to 139. These figures indicate that the challenge of the 1960's was met in Sweden by a program of rationalization and modernization. Although Swedish manufacturing units are smaller on the average than Canadian ones, they have undergone organized restructuring and extensive modernization. The remarkable change in equity is a particularly good indicator of difference in behaviour. As the return on investment in the Canadian pulp and paper industry declined, there was no incentive to modernize. Even Canadian-owned firms channelled significant investments into operations south of the border or diversified into other fields of endeavour. Abitibi and MacMillan Bloedel, for example, have established large-scale operations in the United States.

There is a combination of reasons for the different growth patterns of Swedish versus Canadian pulp and paper industries. First of all, Europe, the natural market for Sweden, developed faster than Canada's main customer, the United States. Sweden also started from a much lower level of productivity, thus the return on investment was higher than in Canada. Another important factor is Canada's unique relationship with the United States and the upward revaluation of the Canadian dollar. In Sweden government and industry took up the challenge in a cooperative effort, and they were able to succeed. A more North American continental and much less national approach by the

Canadian industry appears to be at least partly to blame for relatively less investment and modernization in Canada. Foreign ownership in the Canadian pulp and paper industry has not caused this difference in attitudes and results, but the atmosphere of continentalism emanating from a shared market and mixed ownership certainly has influenced decisions made by the Canadian industry. The sense of national purpose and relatively smooth government industry cooperation which typified the Swedish response would probably not have been possible (and certainly did not occur) under Canada's ownership circumstances.

VII - CONCLUSIONS AND POLICY CONSIDERATIONS

LEVEL OF FOREIGN OWNERSHIP

In the past decade, three parallel trends have emerged in the Canadian forest-based industries regarding foreign ownership.

First, as shown in Exhibits 23 and 24, there has been a gradual increase in total foreign ownership. In 1965, 39.4 per cent of assets in the Canadian pulp and paper industry were foreign controlled; this had increased to 45.2 per cent by 1970.

Second, non-U.S. companies (Japanese, Swedish and Finnish) have increased their penetration in the Atlantic Provinces and British Columbia.

Third, during the same period, there was an opposite tendency toward greater Canadian ownership in the form of provincial government takeovers of firms in serious financial difficulties. Major companies in Newfoundland, Manitoba, and British Columbia were purchased by these provinces to prevent the loss of jobs and the disruption of local communities.

Looking into the future, two contrasting scenarios can be drawn, depending upon which of the above trends will predominate. First, if we assume a strong market for fibre and building materials in the United States and a shortage on the world market, U.S. end users will

probably secure raw material supplies by acquiring viable Canadian-owned companies and/or establishing new plants in Canada. On the west coast, similar moves can be foreseen by Japan. Under these circumstances, Canada will have a strong, efficient, and profitable foreign-owned sector in the forest based industries, while obsolete and/or ill-designed operations will be owned by certain provincial governments and their losses will be carried by Canadian taxpayers.

Assuming a slump on the world market, there is a possibility of low profits in the Canadian industry and a more nationalistic, protectionist attitude in the United States. This scenario may lead to significant plant closures by U.S.-owned firms in Canada and declining employment in Canada by Canadian-owned companies, who may transfer their activities to the U.S. southeast in order to maintain their continental market. Under these circumstances, foreign ownership may decline, but employment in Canada will decline at a significantly faster rate. A breakthrough in the use of non-traditional fibres (such as tropical hardware and sugar cane bagasse) might have a severe impact on Canada's forest-based industries; its severity would, in our view, be relatively independent of the level of foreign ownership then in existence in the industry.

The first, more optimistic market scenario seems to be the more likely one, at least for the near and intermediate future. Barring preventive action under the proposed Foreign Investments Review Act (Bill C 132) or other intervention, this would tend to mean increasing foreign (specifically U.S.) ownership in Ontario. This would be combined

with a stable but narrow market, exposed to long-term fluctuations in the United States. Behavioural impacts of continuing and possibly expanding foreign ownership are described in the two sections that follow.

DIRECT ECONOMIC EFFECTS OF FOREIGN OWNERSHIP

Foreign ownership in the industry has a wide variety of impacts. We were not able to establish any significant disadvantages accruing to Canada in the form of dividend payments, transfer pricing, management fees, and other outflows attributable to foreign ownership. During the recent recession experienced by the industry, such dividends were probably only marginally significant because of the extremely weak profit position of all pulp and paper companies.

The use of transfer pricing for moving profits is very difficult when the commodity sold to the parent or sister firm has a known world market price. Most products of the industry do fall into this category. Management fees, royalties, patents, etc. are most likely to be used in industries where the parent firm is significantly larger and technologically more advanced than the subsidiary. This is not typical in the forest-based industries, where Canadian operations (except in tissue) are at least similar in size to activities in the United States.

A major economic benefit was found to exist for publisher-owned companies. Connections with publishers and/or major marketing organizations domiciled in the United States tended to smooth out the more extreme fluctuations of the economic cycle. Captive producers of news-

print were able to maintain higher production rates and higher profit levels than were Canadian-owned companies or foreign-owned companies which were not controlled by newspaper publishers. The direct beneficial influence of U.S. ownership may be counter-balanced, however, by the continental outlook it helps to generate in the entire industry. This problem is summarized on page 97.

The natural advantages of publisher-controlled companies and U.S. firms with large distribution organizations might be simulated by establishing cooperative marketing and/or distribution arrangements among Canadian firms. Another alternative would be a marketing board which assigns production in a fair manner to producers when capacity is insufficiently utilized and/or which rations available products when scarcities arise. These solutions are clearly in the domain of federal-provincial-private cooperation. They also assume that Canadian-owned firms are willing to act as a separate body from their U.S.-owned competitors.

CORPORATE CITIZENSHIP

We have found no significant differences in good corporate citizenship between the foreign-owned and Canadian-owned companies studied. In the area of the husbandry of forest resources, some foreign-owned firms were found to have a somewhat more long-term view of forest utilization than most Canadian-owned firms, implying a more positive attitude toward conservation.

In the area of pollution control, no significant difference was found except for the better-than-average performance of a U.S. publisher-owned pulp and paper mill.

Research and development was seriously curtailed during the depressed years of the industry. The dismantling of R and D facilities was drastic in both foreign-owned and Canadian-owned firms, and it is too early to determine the extent to which they may be reinstated and how quickly this might occur. Multinational companies may enjoy certain R and D advantages through their membership in the Canadian Pulp and Paper Research Institute, whose results are available to them at a cost related to the companies' Canadian operations while the benefits can be world-wide.

In employment policies, we found that foreign-owned firms employ more non-Canadian citizens in executive positions. As far as mass dismissals are concerned, we have found no significant difference related to ownership. When sales declined, large numbers of workers were fired by both foreign-owned and Canadian-owned firms. Some U.S. firms were apparently less sensitive in their methods of dismissal than the rest of the industry.

In general, we have concluded that good corporate citizenship should be encouraged, and if necessary enforced, on an industry-wide basis irrespective of ownership. This may involve a combination of financial incentives, moral suasion, regulation, and other legislative action. Present policy is evolving along these lines, but it requires constant

review in the light of the level of company compliance and public attitudes.

CANADIAN FIRMS IN
THE UNITED STATES

A number of Canadian-owned pulp and paper companies (for example, Abitibi and MacMillan Bloedel) have established subsidiaries in the United States. As described earlier, this tendency might become disadvantageous to Canada under continuing adverse market conditions for Canadian pulp and newsprint producers. It certainly gives greater flexibility of operation to these companies, and their shareholders will continue to realize the benefits of a North American market, even if the U.S. turns more protectionist or if there is a significant upward valuation of the Canadian dollar. From the point of view of the Canadian economy as a whole, this might be considered to be a disadvantage, since it would tend to make Canadian-owned manufacturers "foot-loose" and would facilitate the movement of capital and employment from Canada to the United States. The establishment of Canadian-owned and -controlled multi-national corporations may, however, have beneficial effects in the form of profit flows into Canada and increased management and research opportunities for Canadians.

In the case of a declining market, the flow of Canadian capital (and jobs) to the United States may become contrary to the national interest. Under these circumstances, the Federal Government might consider taking action in the form of incentive taxation, restrictions on capital flows, or other measures.

EXPANSION OF SUBSIDIZED
FOREIGN OWNERSHIP

In provinces other than Ontario, one can observe a significant expansion of the forest-based industries with the purpose of providing employment and creating a new economic base in underdeveloped areas. In many instances, foreign-owned firms are attracted to these areas by a variety of government subsidies. This tendency not only increases foreign influence in the industry, but also may lead to inherent inefficiency and a requirement for continued subsidies. Using concessional financing by foreign sources, some of these new plants are obliged to buy foreign-manufactured equipment, instead of competitively priced Canadian-made machinery. They can also upset the markets for products of established Canadian pulp and paper companies (both Canadian- and foreign-owned) who do not receive the benefit of subsidies in their operations.

If the trend continues, it will have a serious negative effect in Ontario, particularly if markets are weak. Jobs will be lost, and a serious problem will develop in the North, where the reliance on forest industries is the highest. As the largest contributors to federal income, the taxpayers of Ontario will pay most for the subsidies supporting inefficiency in the industry and leading to an economic decline in Ontario.

Any further government action regarding the utilization of Canada's forest resources should be taken on a joint federal-provincial basis and should take into account the protection of existing jobs,

particularly in the light of the impact that any major disruption could have on remote communities which depend heavily upon forest-oriented activities.

WAGE ESCALATION IN CANADA
AND THE UNITED STATES

The rate of wage increases in the Canadian-based industry has outpaced that of competitors in the United States (see Exhibits 14 and 15). Not only has the rate of growth been higher in Canada, but Canadian workers now earn higher absolute wages than their U.S. counterparts in all comparable regions. This shift has not been supported by a parallel improvement in Canadian productivity.

Representatives of both government and industry have indicated that there may be some form of collusion between U.S.-controlled unions and U.S. ownership in these disproportionate wage arrangements. It is imputed that their final objective could be the general weakening of the competitive position of Canadian-based industry relative to producers in the United States. Other interviewed executives and civil servants disagreed with this conclusion, although they agreed with the validity of the observation itself.

Irrespective of its basic cause (collusion or market forces), a continuation of this trend could have unfavourable consequences, particularly if the market for forest industry products should soften again. The trend of relative wage rates in the U.S. and Canada deserves careful government attention.

A CONTINENTAL APPROACH

The proximity of the large U.S. market, the high degree of U.S. ownership, and the two-way movement of executives across the border lead to a predominantly continental outlook in the industry. There are few perceivable differences in this general outlook among senior executives of Canadian-owned and foreign-owned companies. They are concerned basically with the integrated North American market, the North American forest resource, and the North American labour situation, rather than these aspects separately in Canada and the United States. This continental outlook may reduce the likelihood of a positive and voluntary cooperation in Canada between government and industry, such as that which has occurred in Sweden.

The interviewed executives in the industry (with one exception) are conscious of the interests of their shareholders and of the industry in general, but show very little interest in Canadian problems. Under these circumstances, it is quite possible that they will overlook opportunities to capture fast-growing markets in Japan and Latin America, as long as they find sufficient markets in the United States. They may have no incentive to loosen the extremely strong marketing reliance on a single large customer nation.

Even if there are few measurable differences in individual corporate behaviour between foreign-owned and Canadian-owned companies, the all-pervasive influence of the foreign and particularly the U.S. presence is a most important element in decision-making processes in

the forest-based industries. Executives of Canadian-owned firms exhibit a slightly more negative perception of Canada's ability to compete in new areas (such as the European Common Market and fine paper exports to the United States) than do their counterparts directing foreign-owned corporations. They convey an attitude of free enterprise and objection to any kind of government interference, and they deny the need for Canadian control even more forcefully than do managers of foreign-owned firms in Canada.

FUTURE PROSPECTS

If the market for the products of the Canadian forest remains strong, we can expect pressures for growing foreign ownership in the industry. In Ontario, this will probably mean U.S. ownership. From the point of view of corporate behaviour in husbanding forest resources, fighting pollution, doing research and development, and providing stable employment, this is not likely to cause any significant difference as compared with Canadian ownership. Ontario companies will probably enjoy a more stable market, but they will have less decision-making power and will be managed by more U.S. born executives. The incremental impact of foreign ownership (viewed at the individual company level) will thus tend to be largely neutral.

If the market turns soft, foreign ownership will tend to decline. U.S. publisher-owned firms will probably be in a somewhat better position than Canadian-owned companies. In the case of a radical shift to fibre substitutes, the severity of impact will probably be felt throughout the industry, regardless of ownership.

On balance, the direct, incremental impact of foreign ownership in Canada's and Ontario's forest-based industries appears to be largely neutral, based on the economic measures discussed above. There is, however, a detectable cumulative effect of foreign and particularly U.S. ownership, combined with the strong Canada - U.S. market linkages, on the thinking and outlook of all the forest-based industries in Canada. Whether this continentalization of thinking is or is not acceptable to Canadians is an important political issue that goes beyond the industrial context. Debate on this issue will require consideration of both the incremental and the cumulative effects of foreign ownership as measured by this and other studies.

APPENDIX

QUESTIONNAIRES

JUDGEMENTAL QUESTIONSTIMBER AND PULPWOODA. RATIONALIZATION
WITHIN CANADA

1. Would the pulpwood industry be more efficient with more or fewer firms? Why? What can/should government do towards this more efficient level (for example, increase or decrease subsidies)?
2. If this policy were successful would industry sales volume and employment increase?
3. Would your company employment increase? If so, in what categories (e.g.: skilled, semi-skilled, unskilled, managerial, scientific, engineering)?
4. Would industry exports increase? Would imports into Canada fall? Why?
5. How do you think this problem of too many (too few) companies in the industry arose?

B. R+D: ENGINEERING
AND TECHNICAL SERVICES

1. Has your firm developed any new timber harvesting processes in the last five years?
 - (a) Have they been used successfully?
 - (b) Was the engineering done in Canada?
 - (c) Is the process now being used by other firms?
2. Are you now using any results of Canadian research and development?

JUDGMENTAL QUESTIONSNEWSPRINT AND PULP OPERATIONSA. EXPORTS AND
IMPORTS

1. What is your greatest barrier to export:

- (a) tariffs
- (b) transportation costs
- (c) price competition: explain why foreign prices are lower
- (d) non-tariff barriers?

Please explain.

2. Judging from your position as an independent Canadian company do you think being a subsidiary of a publisher owned U.S. company is an advantage or disadvantage in the export market?
3. What is the impact of Canadian tariff and non-tariff barriers on your imports of materials and/or machinery and equipment? What would be the effect if these barriers were raised? removed?

JUDGEMENTAL QUESTIONS

FINE PAPER OPERATION

A. RATIONALIZATION WITHIN CANADA

1. Would the fine paper industry be more efficient with more or fewer firms? Why? What can/should government do towards this more efficient level (for example, increase or decrease subsidies)?
2. If this policy were successful would industry sales volume and employment increase?
3. Would your company employment increase? If so, in what categories (e.g.: skilled, semi-skilled, unskilled, managerial, scientific, engineering)?
4. Would industry exports increase? Would imports into Canada fall? Why?
5. How do you think this problem of too many (too few) companies in the industry arose?

B. RATIONALIZATION WITH NORTH AMERICA

1. Would industry rationalization of the fine paper industry along the lines of the Auto Pact be good or bad for Canada? For your industry?*
2. Would you company's sales volume increase?
3. Would your employment increase? If so, in what categories?
4. Would industry exports increase, would imports fall?
5. Would the degree of processing within Canada increase or decline? Why?

* The Auto Pact provides for tariff-free movement of new cars between Canada and the U.S. "Good" relates to increased employment, greater exports and increased processing in Canada.

6. Would you from your position judge that the job of managing a Canadian subsidiary be more rewarding under this type of arrangement? Would there be a greater opportunity for Canadians in senior management positions throughout North America? Within Canada?
7. Would this be good for Canadian suppliers?
8. Would more Research + Development (R+D) be done in Canada?

C. WORLD WIDE
RATIONALIZATION
(FREE TRADE)

1. Would this increase or decrease Canadian sales and employment, in your industry? Why?
2. Would this be good for your company in terms of sales and employment, etc.?

For example,

- better utilization of resources
- R+D
- more management positions for Canadians
- more opportunities for skilled workers.

3. Would Canadian exports rise? Would imports fall?

D. EXPORTS
AND IMPORTS

1. What is your greatest barrier to export:
 - (a) tariffs
 - (b) transportation costs
 - (c) price competition: explain why foreign prices are lower
 - (d) non-tariff barriers?

Please explain.

3. Are you familiar with and do you make use of government agencies such as the Export Development Corporation?
4. What additional action could government take in these areas to aid your export operations?
5. Judging from your position as a Canadian company do you think being a subsidiary is an advantage or disadvantage in the export market?
6. What is the impact of Canadian tariff and non-tariff barriers on your imports of materials and/or machinery and equipment? What would be the effect if these barriers were raised? removed?

E. R+D: ENGINEERING AND
TECHNICAL SERVICES

1. What products or processes (if any) in the fine paper part of your business have been researched and developed by you in Canada?
 - (a) Have they been marketed successfully?
 - (b) Was the engineering done in Canada?
 - (c) What percentage has gone to export?
 - (d) Is the product now being produced by any other firm?

JUDGEMENTAL QUESTIONSCONVERTING OPERATIONSA. RATIONALIZATION
WITHIN CANADA

1. Would your section of the industry be more efficient with more or fewer firms? Why? What can/should government do towards this more efficient level (for example, increase or decrease subsidies)?
2. If this policy were successful would industry sales volume and employment increase?
3. Would your company employment increase? If so, in what categories (e.g.: skilled, semi-skilled, unskilled, managerial, scientific, engineering)?
4. Would industry exports increase? Would imports into Canada fall? Why?
5. How do you think this problem of too many (too few) companies in the industry arose?

B. RATIONALIZATION
WITH NORTH AMERICA

1. Would rationalization of your sector of the paper industry along the lines of the Auto Pact be good or bad for Canada? For your industry?
2. Would your company's sales volume increase?
3. Would your employment increase? If so, in what categories?
4. Would industry exports increase, would imports fall?
5. Would the degree of processing from pulp to finished product within Canada increase or decline? Why?
6. Would you from your position judge that the job of managing a Canadian subsidiary be more rewarding under this type of arrangement? Would there be a greater opportunity for Canadians in senior management positions throughout North America? Within Canada?

7. Would this be good for Canadian suppliers?
8. Would more Research + Development (R+D) be done in Canada?

C. WORLD WIDE
RATIONALIZATION
(FREE TRADE)

1. Would this increase or decrease Canadian sales and employment, in your industry? Why?
2. Would this be good for your company in terms of sales and employment, etc.?

For example,

- better utilization of resources
- R+D
- more management positions for Canadians
- more opportunities for skilled workers.

3. Would Canadian exports rise? Would imports fall?

D. EXPORTS
AND IMPORTS

1. What is your greatest barrier to export:
 - (a) tariffs
 - (b) transportation costs
 - (c) price competition: explain why foreign prices are lower
 - (c) non-tariff barriers?

Please explain.

2. Would greater exports affect the stability of your company's operations, by the need to rely upon foreign markets?

3. Are you familiar with and do you make use of government agencies such as the Export Development Corporation?
4. What additional action could government take in these areas to aid your export operations?
5. Judging from your position as a Canadian company, do you think being a subsidiary is an advantage or disadvantage in the export market?
6. What is the impact of Canadian tariff and non-tariff barriers on your imports of materials and/or machinery and equipment? What would be the effect if these barriers were raised? removed?

TOTAL OPERATIONS

1. Total Sales Value (Million \$)

1972 _____

1971 _____

1970 _____

1969 _____

1968 _____

2. Anti-pollutionA) Expenditures (Million \$)

	Ontario		All Canada	
	Investment	Operating Cost	Investment	Operating Cost
1972				
1971				
1970				
1969				
1968				

B) Meeting Standards

Please list provincial requirements for each Ontario plant, the extent of meeting these obligations and your eventual difficulties.

C) What are the cost implications of Federal and Provincial pollution controls? Please specify with respect to unit cost and compare with other provinces and countries.

3. Employment Stability

A) Please list separately for Ontario operations and the rest of Canada:

- plants or operations closed in last 5 years
- plants or operations reduced by more than 25 per cent in last 5 years.

B) What policies could the government initiate to reduce cyclical swings in employment?

Do you know if policies of this type have been introduced in other countries?

4. Equipment Purchase

Total value of machinery and equipment purchased (Million \$).

	Made in Canada	Total
1972		
1968		
1963		

5. Use of Engineering Firms

A) Please list the major engineering services purchased by your firm in 1967 and 1972. For each engagement provide the following information:

- nature of engagement
- name of engineering firm
- is it Canadian owned?
- if not was the service provided from a Canadian office?
- what special skills were involved?
- was the firm hired because it was holding exclusive patents?

Please also state for 1967 and 1972 the total amount of money spent on services of engineering firms. State approximate value of engineering done "in-house".

B) Is it difficult to obtain satisfactory engineering services in Canada? If so, why?

6. Use of Advertising Agencies

Please list for 1967 and 1972 your spending on advertising by agency.

7. Research and Development

A) Please list your spending on R+D (Million \$)

	R+D in Company	Contracted	Total
1972			
1968			
1963			

- B) Is it more applied or pure or has the mix remained the same?

8. Financial

- A) What proportion of your voting stock is owned by non-Canadian citizens?
- B) Of last year's capital requirements what percentage was obtained from:

- subsidiaries (if any)	%
- stock sold in Canada	%
- U.S. banks	%
- Canadian banks	%
- retained earnings	%
- other (please specify)	%
	<u>100%</u>

- C) How does your ratio of debt to equity compare with similar firms in your industry?

9. Management

- A) Please list the number of your executives in 1963, 1967 and 1972 by nationality.

	Vice Presidents		Reporting to Vice Presidents	
	Canadian Citizen	Other	Canadian Citizen	Other
1972				
1968				
1963				

- B) Please state the number of executives who left for employment outside Canada in the last 10 years. Please state also (if you know) if any of them have given up their citizenship or returned to Canada.
- C) Do you have a market research and/or long range planning department? What are its responsibilities and how many full time people does it employ?

10. Your Board

- A) Please state the number of people on your Board of Directors by the categories below. (The parts, of course, will not add up to the total.)

Canadians	_____
Non-Canadians	_____
"Outsiders"*	_____
Total	_____

* Not officers or employees of your company.

- B) Please state the total compensation paid to the Board in 1972.
- C) How frequently does the Board meet?
- D) Is there any explicit dollar limit above which decisions are taken by your Board?
- E) Does the Board set short term policy objectives, e.g. production and sales benefits?

11. Forward Integration.

Does your company own or control any firm making paper containers and/or other secondary products in U.S.? Other countries? Please specify locations and capacities.

4. Equipment Purchase

Total value of machinery and equipment purchased (Million \$).

	Made in Canada	Total
1972		
1968		
1963		

5. Use of Engineering Firms

A) Please list the major engineering services purchased by your firm in 1967 and 1972. For each engagement provide the following information:

- nature of engagement
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	R+D in Company	Contracted	Total
1972			
1968			
1963			

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- other (please specify)	%
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1972				
1968				
1963				

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- C) How frequently does the Board meet?
- D) Is there any explicit dollar limit above which decisions are taken by your Board?
- E) Does the Board set short term policy objectives, e.g. production and sales benefits?

11. Forward Integration.

Does your company own or control any firm making paper containers and/or other secondary products in U.S.? Other countries? Please specify locations and capacities.

FACTUAL QUESTIONSWOODLANDS OPERATIONS1. Timber Limits

Please compile information in the tabular form indicated below for your timber limits, showing separately those in Ontario and those in the rest of Canada.

Location	Square Miles	Allowable Cut (Cunits)	Production 1972	Forest Inventory (Cunits)

2. Foresters

Number of professional foresters in your full time employment

1972 _____

1968 _____

1963 _____

3. Markets

Total sales by cunits and %.

	Your Company		Others		Total
	Cunits	%	Cunits	%	Cunits
1972					
1968					
1963					

4. Employment

	Ontario		All Canada	
	Employees	%	Employees	%
1972				
1968				
1963				

4. Supply of Roundwood to Other Operators in Ontario (Cunits)

1972	_____
1971	_____
1970	_____
1969	_____
1968	_____

FACTUAL QUESTIONS

NEWSPRINT AND PULP OPERATIONS

1. Production

Total \$ Value of Production
(Million \$ and %)

	Ontario		All Canada	
	Million \$	%	Million \$	%
1972				
1968				
1963				

2. Markets

Percentage of Total Newsprint Sales by Destination

	Ontario	Rest of Canada	United States	All Other Exports	Total \$
1972					
1968					
1963					

Percentage of Total Pulp Sales by Destination

	Ontario	Rest of Canada	United States	All Other Exports	Total \$
1972					
1968					
1963					

Percentage of Total Newsprint Sales to Most Important Customer(s)

	Largest	Total 1-5	Total 1-10
1972			
1963			

Percentage of Total Pulp Sales to Most Important Customer(s)

	Largest	Total 1-5	Total 1-10
1972			
1963			

3. Employment - Newsprint and Pulp

	Ontario		All Canada	
	Employees	%	Employees	%
1972				
1968				
1963				

FACTUAL QUESTIONSCONVERTING OPERATIONS1. Production

Total \$ Value of Production
(Million \$ and %)

	Ontario		All Canada	
	Million \$	%	Million \$	%
1972				
1968				
1963				

2. Markets

Percentage of Total Sales by Destination

	Ontario	Rest of Canada	United States	All Other Exports	Total \$	To Abitibi %
1972						
1968						
1963						

Percentage of Total Sales to Most Important Customer(s)

	Largest	Total 1-5	Total 1-10
1972			
1963			

FACTUAL QUESTIONSFINE PAPERS OPERATION1. Production

Total \$ Value of Production
(Million \$ and %)

	Ontario		All Canada	
	Million \$	%	Million \$	%
1972				
1968				
1963				

2. Markets

Percentage of Total Sales by Destination

	Ontario	Rest of Canada	United States	All Other Exports	Total \$
1972					
1968					
1963					

Percentage of Total Sales to Most Important Customer(s)

	Largest	Total 1-5	Total 1-10
1972			
1963			

3. Employment

1972

1968

1963

Ontario		All Canada	
Employees	%	Employees	%

3 1761 1146594 9

